AWS Config API Reference API Version 2014-11-12



AWS Config: API Reference

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Table of Contents

	-ConfieDula	
Deleti	eConfigRule	
	Request Syntax	
	Request Parameters	
	Response Elements	
	Errors	
Delete	eConfigurationRecorder	٠.
	Request Syntax	
	Request Parameters	
	Response Elements	
	Errors	
Delete	eDeliveryChannel	
	Request Syntax	
	Request Parameters	
	Response Elements	
	Errors	
	eEvaluationResults	
	Request Syntax	
	Request Parameters	
	Response Elements	
	Errors	
Daliva	erConfigSnapshot	
DCIIV	Request Syntax	
	Request Parameters	
	·	
	Response Syntax	
	Response Elements	
	Errors	
Desci	ribeComplianceByConfigRule	
	Request Syntax	
	Request Parameters	
	Response Syntax	
	Response Elements	
_	Errors	
Desci	ibeComplianceByResource	
	Request Syntax	
	Request Parameters	
	Response Syntax	
	Response Elements	
	Errors	
Desci	ribeConfigRuleEvaluationStatus	
	Request Syntax	
	Request Parameters	
	Response Syntax	
	Response Elements	
	Errors	
Desci	ribeConfigRules	
	Request Syntax	
	Request Parameters	
	Response Syntax	
	Response Elements	
	Errors	
Desci	ribeConfigurationRecorders	
D0301	Request Syntax	
	Request Parameters	

Response Syntax	
Response Elements	 18
Errors	 19
DescribeConfigurationRecorderStatus	 20
Request Syntax	
Request Parameters	
Response Syntax	
Response Elements	
Errors	
Describe Delivery Channels	
Request Syntax	
Request Parameters	
Response Syntax	
Response Elements	
Errors	
Describe Delivery Channel Status	
Request Syntax	
Request Parameters	
Response Syntax	
Response Elements	
Errors	
GetComplianceDetailsByConfigRule	
Request Syntax	
Request Parameters	
Response Syntax	
Response Elements	
Errors	
GetComplianceDetailsByResource	
Request Syntax	
Request Parameters	
Response Syntax	
Response Elements	
Errors	
GetComplianceSummaryByConfigRule	 30
Response Syntax	 30
Response Elements	 30
Errors	 30
GetComplianceSummaryByResourceType	 31
Request Syntax	 31
Request Parameters	 31
Response Syntax	 31
Response Elements	 31
Errors	
GetResourceConfigHistory	
Request Syntax	 33
Request Parameters	33
Response Syntax	34
Response Elements	
Errors	
ListDiscoveredResources	
Request Syntax	36
Request Parameters	
Response Syntax	
Response Elements	
Errors	
PutConfigRule	
Request Syntax	39
Request Parameters	
:	

	Response Elements	
	Errors	40
	PutConfigurationRecorder	42
	Request Syntax	42
	Request Parameters	
	Response Elements	
	Errors	
	PutDeliveryChannel	
	Request Syntax	
	Request Parameters	
	Response Elements	
	·	
	Errors	
	PutEvaluations	
	Request Syntax	
	Request Parameters	
	Response Syntax	
	Response Elements	
	Errors	
	StartConfigRulesEvaluation	48
	Request Syntax	48
	Request Parameters	48
	Response Elements	48
	Errors	48
	StartConfigurationRecorder	50
	Request Syntax	
	Request Parameters	
	Response Elements	
	Errors	
	StopConfigurationRecorder	
	Request Syntax	
	Request Parameters	
	Response Elements	
	Errors	
Doto		
Dala	Types	
	Compliance	
	Contents	
	ComplianceByConfigRule	
	Contents	
	ComplianceByResource	
	Contents	
	ComplianceContributorCount	57
	Contents	
	ComplianceSummary	
	Contents	
	ComplianceSummaryByResourceType	
	Contents	
	ConfigExportDeliveryInfo	60
	Contents	60
	ConfigRule	61
	Contents	61
	ConfigRuleEvaluationStatus	63
	Contents	
	ConfigSnapshotDeliveryProperties	
	Contents	
	ConfigStreamDeliveryInfo	
	Contents	
	ConfigurationItem	
	Contents	
		٥,

AWS Config API Reference

(ConfigurationRecorder	70
	Contents	70
(ConfigurationRecorderStatus	71
	Contents	71
ı	DeliveryChannel	72
	Contents	72
ı	DeliveryChannelStatus	74
	Contents	74
	Evaluation	75
	Contents	75
	EvaluationResult	76
	Contents	76
ı	EvaluationResultIdentifier	77
	Contents	77
	EvaluationResultQualifier	78
	Contents	78
	RecordingGroup	79
	Contents	79
	Relationship	81
	Contents	81
ı	ResourceIdentifier	82
	Contents	82
;	Scope	83
	Contents	83
;	Source	84
	Contents	84
;	SourceDetail	85
	Contents	85
Comm	non Parameters	86
Comm	non Errors	88

Welcome

AWS Config provides a way to keep track of the configurations of all the AWS resources associated with your AWS account. You can use AWS Config to get the current and historical configurations of each AWS resource and also to get information about the relationship between the resources. An AWS resource can be an Amazon Compute Cloud (Amazon EC2) instance, an Elastic Block Store (EBS) volume, an Elastic network Interface (ENI), or a security group. For a complete list of resources currently supported by AWS Config, see Supported AWS Resources.

You can access and manage AWS Config through the AWS Management Console, the AWS Command Line Interface (AWS CLI), the AWS Config API, or the AWS SDKs for AWS Config This reference guide contains documentation for the AWS Config API and the AWS CLI commands that you can use to manage AWS Config.

The AWS Config API uses the Signature Version 4 protocol for signing requests. For more information about how to sign a request with this protocol, see Signature Version 4 Signing Process.

For detailed information about AWS Config features and their associated actions or commands, as well as how to work with AWS Management Console, see What Is AWS Config? in the AWS Config Developer Guide.

This document was last published on December 9, 2016.

Actions

The following actions are supported:

- DeleteConfigRule (p. 3)
- DeleteConfigurationRecorder (p. 4)
- DeleteDeliveryChannel (p. 5)
- DeleteEvaluationResults (p. 6)
- DeliverConfigSnapshot (p. 7)
- DescribeComplianceByConfigRule (p. 9)
- DescribeComplianceByResource (p. 11)
- DescribeConfigRuleEvaluationStatus (p. 14)
- DescribeConfigRules (p. 16)
- DescribeConfigurationRecorders (p. 18)
- DescribeConfigurationRecorderStatus (p. 20)
- DescribeDeliveryChannels (p. 22)
- DescribeDeliveryChannelStatus (p. 24)
- GetComplianceDetailsByConfigRule (p. 26)
- GetComplianceDetailsByResource (p. 28)
- GetComplianceSummaryByConfigRule (p. 30)
- GetComplianceSummaryByResourceType (p. 31)
- GetResourceConfigHistory (p. 33)
- ListDiscoveredResources (p. 36)
- PutConfigRule (p. 39)
- PutConfigurationRecorder (p. 42)
- PutDeliveryChannel (p. 44)
- PutEvaluations (p. 46)
- StartConfigRulesEvaluation (p. 48)
- StartConfigurationRecorder (p. 50)
- StopConfigurationRecorder (p. 51)

DeleteConfigRule

Deletes the specified AWS Config rule and all of its evaluation results.

AWS Config sets the state of a rule to DELETING until the deletion is complete. You cannot update a rule while it is in this state. If you make a PutConfigRule or DeleteConfigRule request for the rule, you will receive a ResourceInUseException.

You can check the state of a rule by using the DescribeConfigRules request.

Request Syntax

```
{
    "ConfigRuleName": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 86).

The request accepts the following data in JSON format.

ConfigRuleName (p. 3)

The name of the AWS Config rule that you want to delete.

Type: String

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

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. 88).

NoSuchConfigRuleException

One or more AWS Config rules in the request are invalid. Verify that the rule names are correct and try again.

HTTP Status Code: 400

ResourceInUseException

The rule is currently being deleted or the rule is deleting your evaluation results. Try your request again later.

DeleteConfigurationRecorder

Deletes the configuration recorder.

After the configuration recorder is deleted, AWS Config will not record resource configuration changes until you create a new configuration recorder.

This action does not delete the configuration information that was previously recorded. You will be able to access the previously recorded information by using the <code>GetResourceConfigHistory</code> action, but you will not be able to access this information in the AWS Config console until you create a new configuration recorder.

Request Syntax

```
{
    "ConfigurationRecorderName": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 86).

The request accepts the following data in JSON format.

ConfigurationRecorderName (p. 4)

The name of the configuration recorder to be deleted. You can retrieve the name of your configuration recorder by using the <code>DescribeConfigurationRecorders</code> action.

Type: String

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

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. 88).

NoSuchConfigurationRecorderException

You have specified a configuration recorder that does not exist.

DeleteDeliveryChannel

Deletes the delivery channel.

Before you can delete the delivery channel, you must stop the configuration recorder by using the StopConfigurationRecorder (p. 51) action.

Request Syntax

```
{
    "DeliveryChannelName": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 86).

The request accepts the following data in JSON format.

DeliveryChannelName (p. 5)

The name of the delivery channel to delete.

Type: String

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

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. 88).

LastDeliveryChannelDeleteFailedException

You cannot delete the delivery channel you specified because the configuration recorder is running.

HTTP Status Code: 400

NoSuchDeliveryChannelException

You have specified a delivery channel that does not exist.

DeleteEvaluationResults

Deletes the evaluation results for the specified Config rule. You can specify one Config rule per request. After you delete the evaluation results, you can call the StartConfigRulesEvaluation (p. 48) API to start evaluating your AWS resources against the rule.

Request Syntax

```
{
    "ConfigRuleName": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 86).

The request accepts the following data in JSON format.

ConfigRuleName (p. 6)

The name of the Config rule for which you want to delete the evaluation results.

Type: String

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

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. 88).

NoSuchConfigRuleException

One or more AWS Config rules in the request are invalid. Verify that the rule names are correct and try again.

HTTP Status Code: 400

ResourceInUseException

The rule is currently being deleted or the rule is deleting your evaluation results. Try your request again later.

DeliverConfigSnapshot

Schedules delivery of a configuration snapshot to the Amazon S3 bucket in the specified delivery channel. After the delivery has started, AWS Config sends following notifications using an Amazon SNS topic that you have specified.

- · Notification of starting the delivery.
- · Notification of delivery completed, if the delivery was successfully completed.
- Notification of delivery failure, if the delivery failed to complete.

Request Syntax

```
{
    "deliveryChannelName": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 86).

The request accepts the following data in JSON format.

deliveryChannelName (p. 7)

The name of the delivery channel through which the snapshot is delivered.

Type: String

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

Required: Yes

Response Syntax

```
{
    "configSnapshotId": "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.

configSnapshotId (p. 7)

The ID of the snapshot that is being created.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 88).

NoAvailableConfigurationRecorderException

There are no configuration recorders available to provide the role needed to describe your resources. Create a configuration recorder.

AWS Config API Reference Errors

HTTP Status Code: 400

NoRunningConfigurationRecorderException

There is no configuration recorder running.

HTTP Status Code: 400

NoSuchDeliveryChannelException

You have specified a delivery channel that does not exist.

DescribeComplianceByConfigRule

Indicates whether the specified AWS Config rules are compliant. If a rule is noncompliant, this action returns the number of AWS resources that do not comply with the rule.

A rule is compliant if all of the evaluated resources comply with it, and it is noncompliant if any of these resources do not comply.

If AWS Config has no current evaluation results for the rule, it returns INSUFFICIENT_DATA. This result might indicate one of the following conditions:

- AWS Config has never invoked an evaluation for the rule. To check whether it has, use the DescribeConfigRuleEvaluationStatus action to get the LastSuccessfulInvocationTime and LastFailedInvocationTime.
- The rule's AWS Lambda function is failing to send evaluation results to AWS Config. Verify that the role that you assigned to your configuration recorder includes the config:PutEvaluations permission. If the rule is a custom rule, verify that the AWS Lambda execution role includes the config:PutEvaluations permission.
- The rule's AWS Lambda function has returned NOT_APPLICABLE for all evaluation results. This can occur if the resources were deleted or removed from the rule's scope.

Request Syntax

```
{
   "ComplianceTypes": [ "string" ],
   "ConfigRuleNames": [ "string" ],
   "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 86).

The request accepts the following data in JSON format.

ComplianceTypes (p. 9)

Filters the results by compliance.

The allowed values are COMPLIANT, NON_COMPLIANT, and INSUFFICIENT_DATA.

Type: array of Strings

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

Valid Values: COMPLIANT | NON COMPLIANT | NOT APPLICABLE | INSUFFICIENT DATA

Required: No

ConfigRuleNames (p. 9)

Specify one or more AWS Config rule names to filter the results by rule.

Type: array of Strings

Array Members: Minimum number of 0 items. Maximum number of 25 items.

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

Required: No NextToken (p. 9)

The nextToken string returned on a previous page that you use to get the next page of results in a paginated response.

Type: String Required: No

Response Syntax

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.

ComplianceByConfigRules (p. 10)

Indicates whether each of the specified AWS Config rules is compliant.

Type: array of ComplianceByConfigRule (p. 55) objects

NextToken (p. 10)

The string that you use in a subsequent request to get the next page of results in a paginated response.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 88).

InvalidParameterValueException

One or more of the specified parameters are invalid. Verify that your parameters are valid and try again.

HTTP Status Code: 400

NoSuchConfigRuleException

One or more AWS Config rules in the request are invalid. Verify that the rule names are correct and try again.

DescribeComplianceByResource

Indicates whether the specified AWS resources are compliant. If a resource is noncompliant, this action returns the number of AWS Config rules that the resource does not comply with.

A resource is compliant if it complies with all the AWS Config rules that evaluate it. It is noncompliant if it does not comply with one or more of these rules.

If AWS Config has no current evaluation results for the resource, it returns INSUFFICIENT_DATA. This result might indicate one of the following conditions about the rules that evaluate the resource:

- AWS Config has never invoked an evaluation for the rule. To check whether it has, use the DescribeConfigRuleEvaluationStatus action to get the LastSuccessfulInvocationTime and LastFailedInvocationTime.
- The rule's AWS Lambda function is failing to send evaluation results to AWS Config. Verify that the role that you assigned to your configuration recorder includes the config:PutEvaluations permission. If the rule is a custom rule, verify that the AWS Lambda execution role includes the config:PutEvaluations permission.
- The rule's AWS Lambda function has returned NOT_APPLICABLE for all evaluation results. This can occur if the resources were deleted or removed from the rule's scope.

Request Syntax

```
{
    "ComplianceTypes": [ "string" ],
    "Limit": number,
    "NextToken": "string",
    "ResourceId": "string",
    "ResourceType": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 86).

The request accepts the following data in JSON format.

ComplianceTypes (p. 11)

Filters the results by compliance.

The allowed values are COMPLIANT, NON_COMPLIANT, and INSUFFICIENT_DATA.

Type: array of Strings

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

Valid Values: COMPLIANT | NON_COMPLIANT | NOT_APPLICABLE | INSUFFICIENT_DATA

Required: No

Limit (p. 11)

The maximum number of evaluation results returned on each page. The default is 10. You cannot specify a limit greater than 100. If you specify 0, AWS Config uses the default.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 100.

Required: No

NextToken (p. 11)

The nextToken string returned on a previous page that you use to get the next page of results in a paginated response.

Type: String Required: No Resourceld (p. 11)

The ID of the AWS resource for which you want compliance information. You can specify only one resource ID. If you specify a resource ID, you must also specify a type for ResourceType.

Type: String

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

Required: No

ResourceType (p. 11)

The types of AWS resources for which you want compliance information; for example,

AWS::EC2::Instance. For this action, you can specify that the resource type is an AWS account by specifying AWS:::Account.

Type: String

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

Required: No

Response Syntax

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.

ComplianceByResources (p. 12)

Indicates whether the specified AWS resource complies with all of the AWS Config rules that evaluate it.

Type: array of ComplianceByResource (p. 56) objects

NextToken (p. 12)

The string that you use in a subsequent request to get the next page of results in a paginated response.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 88).

AWS Config API Reference Errors

InvalidNextTokenException

The specified next token is invalid. Specify the nextToken string that was returned in the previous response to get the next page of results.

HTTP Status Code: 400

InvalidParameterValueException

One or more of the specified parameters are invalid. Verify that your parameters are valid and try again.

DescribeConfigRuleEvaluationStatus

Returns status information for each of your AWS managed Config rules. The status includes information such as the last time AWS Config invoked the rule, the last time AWS Config failed to invoke the rule, and the related error for the last failure.

Request Syntax

```
{
   "ConfigRuleNames": [ "string" ],
   "Limit": number,
   "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 86).

The request accepts the following data in JSON format.

ConfigRuleNames (p. 14)

The name of the AWS managed Config rules for which you want status information. If you do not specify any names, AWS Config returns status information for all AWS managed Config rules that you use.

Type: array of Strings

Array Members: Minimum number of 0 items. Maximum number of 25 items.

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

Required: No

Limit (p. 14)

The number of rule evaluation results that you want returned.

This parameter is required if the rule limit for your account is more than the default of 50 rules.

For more information about requesting a rule limit increase, see AWS Config Limits in the AWS General Reference Guide.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 50.

Required: No

NextToken (p. 14)

The NextToken string returned on a previous page that you use to get the next page of results in a paginated response.

Type: String Required: No

Response Syntax

AWS Config API Reference Response Elements

```
"FirstEvaluationStarted": boolean,
    "LastErrorCode": "string",
    "LastErrorMessage": "string",
    "LastFailedEvaluationTime": number,
    "LastFailedInvocationTime": number,
    "LastSuccessfulEvaluationTime": number,
    "LastSuccessfulInvocationTime": number
}
],
"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.

ConfigRulesEvaluationStatus (p. 14)

Status information about your AWS managed Config rules.

Type: array of ConfigRuleEvaluationStatus (p. 63) objects

NextToken (p. 14)

The string that you use in a subsequent request to get the next page of results in a paginated response.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 88).

InvalidParameterValueException

One or more of the specified parameters are invalid. Verify that your parameters are valid and try again.

HTTP Status Code: 400

NoSuchConfigRuleException

One or more AWS Config rules in the request are invalid. Verify that the rule names are correct and try again.

DescribeConfigRules

Returns details about your AWS Config rules.

Request Syntax

```
{
    "ConfigRuleNames": [ "string" ],
    "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 86).

The request accepts the following data in JSON format.

ConfigRuleNames (p. 16)

The names of the AWS Config rules for which you want details. If you do not specify any names, AWS Config returns details for all your rules.

Type: array of Strings

Array Members: Minimum number of 0 items. Maximum number of 25 items.

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

Required: No

NextToken (p. 16)

The nextToken string returned on a previous page that you use to get the next page of results in a paginated response.

Type: String Required: No

Response Syntax

```
"ConfigRules": [
      "ConfigRuleArn": "string",
      "ConfigRuleId": "string",
      "ConfigRuleName": "string",
      "ConfigRuleState": "string",
      "Description": "string",
      "InputParameters": "string",
      "MaximumExecutionFrequency": "string",
      "Scope": {
         "ComplianceResourceId": "string",
         "ComplianceResourceTypes": [ "string" ],
         "TagKey": "string",
         "TagValue": "string"
      },
      "Source": {
         "Owner": "string",
         "SourceDetails": [
            {
```

AWS Config API Reference Response Elements

Response Elements

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

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

ConfigRules (p. 16)

The details about your AWS Config rules.

Type: array of ConfigRule (p. 61) objects

NextToken (p. 16)

The string that you use in a subsequent request to get the next page of results in a paginated response.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 88).

NoSuchConfigRuleException

One or more AWS Config rules in the request are invalid. Verify that the rule names are correct and try again.

DescribeConfigurationRecorders

Returns the details for the specified configuration recorders. If the configuration recorder is not specified, this action returns the details for all configuration recorders associated with the account.

Note

Currently, you can specify only one configuration recorder per region in your account.

Request Syntax

```
{
    "ConfigurationRecorderNames": [ "string" ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 86).

The request accepts the following data in JSON format.

ConfigurationRecorderNames (p. 18)

A list of configuration recorder names.

Type: array of Strings

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

Required: No

Response Syntax

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.

ConfigurationRecorders (p. 18)

A list that contains the descriptions of the specified configuration recorders.

Type: array of ConfigurationRecorder (p. 70) objects

AWS Config API Reference Errors

Errors

For information about the errors that are common to all actions, see Common Errors (p. 88).

NoSuchConfigurationRecorderException

You have specified a configuration recorder that does not exist.

DescribeConfigurationRecorderStatus

Returns the current status of the specified configuration recorder. If a configuration recorder is not specified, this action returns the status of all configuration recorder associated with the account.

Note

Currently, you can specify only one configuration recorder per region in your account.

Request Syntax

```
{
    "ConfigurationRecorderNames": [ "string" ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 86).

The request accepts the following data in JSON format.

ConfigurationRecorderNames (p. 20)

The name(s) of the configuration recorder. If the name is not specified, the action returns the current status of all the configuration recorders associated with the account.

Type: array of Strings

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

Required: No

Response Syntax

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.

ConfigurationRecordersStatus (p. 20)

A list that contains status of the specified recorders.

Type: array of ConfigurationRecorderStatus (p. 71) objects

AWS Config API Reference Errors

Errors

For information about the errors that are common to all actions, see Common Errors (p. 88).

NoSuchConfigurationRecorderException

You have specified a configuration recorder that does not exist.

DescribeDeliveryChannels

Returns details about the specified delivery channel. If a delivery channel is not specified, this action returns the details of all delivery channels associated with the account.

Note

Currently, you can specify only one delivery channel per region in your account.

Request Syntax

```
{
    "DeliveryChannelNames": [ "string" ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 86).

The request accepts the following data in JSON format.

DeliveryChannelNames (p. 22)

A list of delivery channel names.

Type: array of Strings

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

Required: No

Response Syntax

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.

DeliveryChannels (p. 22)

A list that contains the descriptions of the specified delivery channel.

Type: array of DeliveryChannel (p. 72) objects

AWS Config API Reference Errors

Errors

For information about the errors that are common to all actions, see Common Errors (p. 88).

NoSuchDeliveryChannelException

You have specified a delivery channel that does not exist.

DescribeDeliveryChannelStatus

Returns the current status of the specified delivery channel. If a delivery channel is not specified, this action returns the current status of all delivery channels associated with the account.

Note

Currently, you can specify only one delivery channel per region in your account.

Request Syntax

```
{
    "DeliveryChannelNames": [ "string" ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 86).

The request accepts the following data in JSON format.

DeliveryChannelNames (p. 24)

A list of delivery channel names.

Type: array of Strings

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

Required: No

Response Syntax

```
"DeliveryChannelsStatus": [
      "configHistoryDeliveryInfo": {
         "lastAttemptTime": number,
         "lastErrorCode": "string",
         "lastErrorMessage": "string",
         "lastStatus": "string",
         "lastSuccessfulTime": number,
         "nextDeliveryTime": number
      },
      "configSnapshotDeliveryInfo": {
         "lastAttemptTime": number,
         "lastErrorCode": "string",
         "lastErrorMessage": "string",
         "lastStatus": "string",
         "lastSuccessfulTime": number,
         "nextDeliveryTime": number
      },
      "configStreamDeliveryInfo": {
         "lastErrorCode": "string",
         "lastErrorMessage": "string",
         "lastStatus": "string",
         "lastStatusChangeTime": number
      },
      "name": "string"
```

AWS Config API Reference Response Elements

```
}
1
}
```

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.

DeliveryChannelsStatus (p. 24)

A list that contains the status of a specified delivery channel.

Type: array of DeliveryChannelStatus (p. 74) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 88).

NoSuchDeliveryChannelException

You have specified a delivery channel that does not exist.

GetComplianceDetailsByConfigRule

Returns the evaluation results for the specified AWS Config rule. The results indicate which AWS resources were evaluated by the rule, when each resource was last evaluated, and whether each resource complies with the rule.

Request Syntax

```
{
   "ComplianceTypes": [ "string" ],
   "ConfigRuleName": "string",
   "Limit": number,
   "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 86).

The request accepts the following data in JSON format.

ComplianceTypes (p. 26)

Filters the results by compliance.

The allowed values are COMPLIANT, NON_COMPLIANT, and NOT_APPLICABLE.

Type: array of Strings

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

Valid Values: COMPLIANT | NON_COMPLIANT | NOT_APPLICABLE | INSUFFICIENT_DATA

Required: No

ConfigRuleName (p. 26)

The name of the AWS Config rule for which you want compliance information.

Type: String

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

Required: Yes

Limit (p. 26)

The maximum number of evaluation results returned on each page. The default is 10. You cannot specify a limit greater than 100. If you specify 0, AWS Config uses the default.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 100.

Required: No

NextToken (p. 26)

The nextToken string returned on a previous page that you use to get the next page of results in a paginated response.

Type: String Required: No

Response Syntax

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.

EvaluationResults (p. 26)

Indicates whether the AWS resource complies with the specified AWS Config rule.

Type: array of EvaluationResult (p. 76) objects

NextToken (p. 26)

The string that you use in a subsequent request to get the next page of results in a paginated response.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 88).

InvalidNextTokenException

The specified next token is invalid. Specify the nextToken string that was returned in the previous response to get the next page of results.

HTTP Status Code: 400

InvalidParameterValueException

One or more of the specified parameters are invalid. Verify that your parameters are valid and try again.

HTTP Status Code: 400

NoSuchConfigRuleException

One or more AWS Config rules in the request are invalid. Verify that the rule names are correct and try again.

GetComplianceDetailsByResource

Returns the evaluation results for the specified AWS resource. The results indicate which AWS Config rules were used to evaluate the resource, when each rule was last used, and whether the resource complies with each rule.

Request Syntax

```
{
   "ComplianceTypes": [ "string" ],
   "NextToken": "string",
   "ResourceId": "string",
   "ResourceType": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 86).

The request accepts the following data in JSON format.

ComplianceTypes (p. 28)

Filters the results by compliance.

The allowed values are COMPLIANT, NON_COMPLIANT, and NOT_APPLICABLE.

Type: array of Strings

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

Valid Values: COMPLIANT | NON_COMPLIANT | NOT_APPLICABLE | INSUFFICIENT_DATA

Required: No

NextToken (p. 28)

The nextToken string returned on a previous page that you use to get the next page of results in a paginated response.

Type: String Required: No

Resourceld (p. 28)

The ID of the AWS resource for which you want compliance information.

Type: String

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

Required: Yes

ResourceType (p. 28)

The type of the AWS resource for which you want compliance information.

Type: String

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

Required: Yes

Response Syntax

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.

EvaluationResults (p. 28)

Indicates whether the specified AWS resource complies each AWS Config rule.

Type: array of EvaluationResult (p. 76) objects

NextToken (p. 28)

The string that you use in a subsequent request to get the next page of results in a paginated response.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 88).

InvalidParameterValueException

One or more of the specified parameters are invalid. Verify that your parameters are valid and try again.

GetComplianceSummaryByConfigRule

Returns the number of AWS Config rules that are compliant and noncompliant, up to a maximum of 25 for each.

Response Syntax

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.

ComplianceSummary (p. 30)

The number of AWS Config rules that are compliant and the number that are noncompliant, up to a maximum of 25 for each.

Type: ComplianceSummary (p. 58) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 88).

GetComplianceSummaryByResourceType

Returns the number of resources that are compliant and the number that are noncompliant. You can specify one or more resource types to get these numbers for each resource type. The maximum number returned is 100.

Request Syntax

```
{
    "ResourceTypes": [ "string" ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 86).

The request accepts the following data in JSON format.

ResourceTypes (p. 31)

Specify one or more resource types to get the number of resources that are compliant and the number that are noncompliant for each resource type.

For this request, you can specify an AWS resource type such as AWS::EC2::Instance, and you can specify that the resource type is an AWS account by specifying AWS::::Account.

Type: array of Strings

Array Members: Minimum number of 0 items. Maximum number of 20 items.

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

Required: No

Response Syntax

Response Elements

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

AWS Config API Reference Errors

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

ComplianceSummariesByResourceType (p. 31)

The number of resources that are compliant and the number that are noncompliant. If one or more resource types were provided with the request, the numbers are returned for each resource type. The maximum number returned is 100.

Type: array of ComplianceSummaryByResourceType (p. 59) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 88).

InvalidParameterValueException

One or more of the specified parameters are invalid. Verify that your parameters are valid and try again.

GetResourceConfigHistory

Returns a list of configuration items for the specified resource. The list contains details about each state of the resource during the specified time interval.

The response is paginated, and by default, AWS Config returns a limit of 10 configuration items per page. You can customize this number with the limit parameter. The response includes a nextToken string, and to get the next page of results, run the request again and enter this string for the nextToken parameter.

Note

Each call to the API is limited to span a duration of seven days. It is likely that the number of records returned is smaller than the specified limit. In such cases, you can make another call, using the nextToken.

Request Syntax

```
{
  "chronologicalOrder": "string",
  "earlierTime": number,
  "laterTime": number,
  "limit": number,
  "nextToken": "string",
  "resourceId": "string",
  "resourceType": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 86).

The request accepts the following data in JSON format.

chronologicalOrder (p. 33)

The chronological order for configuration items listed. By default the results are listed in reverse chronological order.

Type: String

Valid Values: Reverse | Forward

Required: No earlierTime (p. 33)

The time stamp that indicates an earlier time. If not specified, the action returns paginated results that contain configuration items that start from when the first configuration item was recorded.

Type: Timestamp Required: No

laterTime (p. 33)

The time stamp that indicates a later time. If not specified, current time is taken.

Type: Timestamp Required: No

limit (p. 33)

The maximum number of configuration items returned on each page. The default is 10. You cannot specify a limit greater than 100. If you specify 0, AWS Config uses the default.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 100.

```
nextToken (p. 33)
   The nextToken string returned on a previous page that you use to get the next page of results in
   a paginated response.
   Type: String
   Required: No
resourceld (p. 33)
   The ID of the resource (for example., sq-xxxxxx).
   Type: String
   Required: Yes
resourceType (p. 33)
   The resource type.
   Type: String
   Valid Values: AWS::EC2::CustomerGateway | AWS::EC2::EIP |
   AWS::EC2::Host | AWS::EC2::Instance | AWS::EC2::InternetGateway |
   AWS::EC2::NetworkAcl | AWS::EC2::NetworkInterface | AWS::EC2::RouteTable
   | AWS::EC2::SecurityGroup | AWS::EC2::Subnet | AWS::CloudTrail::Trail
   | AWS::EC2::Volume | AWS::EC2::VPC | AWS::EC2::VPNConnection |
   AWS::EC2::VPNGateway | AWS::IAM::Group | AWS::IAM::Policy | AWS::IAM::Role
   | AWS::IAM::User | AWS::ACM::Certificate | AWS::RDS::DBInstance |
   AWS::RDS::DBSubnetGroup | AWS::RDS::DBSecurityGroup | AWS::RDS::DBSnapshot
   | AWS::RDS::EventSubscription | AWS::ElasticLoadBalancingV2::LoadBalancer
   | AWS::S3::Bucket | AWS::SSM::ManagedInstanceInventory |
   AWS::Redshift::Cluster | AWS::Redshift::ClusterSnapshot |
   AWS::Redshift::ClusterParameterGroup | AWS::Redshift::ClusterSecurityGroup
   | AWS::Redshift::ClusterSubnetGroup | AWS::Redshift::EventSubscription
   Required: Yes
```

Response Syntax

```
"configurationItems": [
      "accountId": "string",
      "arn": "string",
      "availabilityZone": "string",
      "awsRegion": "string",
      "configuration": "string",
      "configurationItemCaptureTime": number,
      "configurationItemMD5Hash": "string",
      "configurationItemStatus": "string",
      "configurationStateId": "string",
      "relatedEvents": [ "string" ],
      "relationships": [
            "relationshipName": "string",
            "resourceId": "string",
            "resourceName": "string",
            "resourceType": "string"
      ],
      "resourceCreationTime": number,
      "resourceId": "string",
      "resourceName": "string",
      "resourceType": "string",
```

```
"supplementaryConfiguration": {
         "string" : "string"
         },
         "tags": {
                "string" : "string"
         },
          "version": "string"
         }
         l,
         "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.

configurationItems (p. 34)

A list that contains the configuration history of one or more resources.

Type: array of ConfigurationItem (p. 67) objects

nextToken (p. 34)

The string that you use in a subsequent request to get the next page of results in a paginated response.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 88).

InvalidLimitException

The specified limit is outside the allowable range.

HTTP Status Code: 400

InvalidNextTokenException

The specified next token is invalid. Specify the nextToken string that was returned in the previous response to get the next page of results.

HTTP Status Code: 400

InvalidTimeRangeException

The specified time range is not valid. The earlier time is not chronologically before the later time.

HTTP Status Code: 400

NoAvailableConfigurationRecorderException

There are no configuration recorders available to provide the role needed to describe your resources. Create a configuration recorder.

HTTP Status Code: 400

ResourceNotDiscoveredException

You have specified a resource that is either unknown or has not been discovered.

HTTP Status Code: 400

ValidationException

The requested action is not valid.

ListDiscoveredResources

Accepts a resource type and returns a list of resource identifiers for the resources of that type. A resource identifier includes the resource type, ID, and (if available) the custom resource name. The results consist of resources that AWS Config has discovered, including those that AWS Config is not currently recording. You can narrow the results to include only resources that have specific resource IDs or a resource name.

Note

You can specify either resource IDs or a resource name but not both in the same request.

The response is paginated, and by default AWS Config lists 100 resource identifiers on each page. You can customize this number with the limit parameter. The response includes a nextToken string, and to get the next page of results, run the request again and enter this string for the nextToken parameter.

Request Syntax

```
{
    "includeDeletedResources": boolean,
    "limit": number,
    "nextToken": "string",
    "resourceIds": [ "string" ],
    "resourceName": "string",
    "resourceType": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 86).

The request accepts the following data in JSON format.

includeDeletedResources (p. 36)

Specifies whether AWS Config includes deleted resources in the results. By default, deleted resources are not included.

Type: Boolean Required: No

limit (p. 36)

The maximum number of resource identifiers returned on each page. The default is 100. You cannot specify a limit greater than 100. If you specify 0, AWS Config uses the default.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 100.

Required: No nextToken (p. 36)

The nextToken string returned on a previous page that you use to get the next page of results in a paginated response.

Type: String Required: No resourcelds (p. 36)

The IDs of only those resources that you want AWS Config to list in the response. If you do not specify this parameter, AWS Config lists all resources of the specified type that it has discovered.

Type: array of Strings

Required: No

resourceName (p. 36)

The custom name of only those resources that you want AWS Config to list in the response. If you do not specify this parameter, AWS Config lists all resources of the specified type that it has discovered.

Type: String Required: No

resourceType (p. 36)

The type of resources that you want AWS Config to list in the response.

Type: String

```
Valid Values: AWS::EC2::CustomerGateway | AWS::EC2::EIP |
AWS::EC2::Host | AWS::EC2::Instance | AWS::EC2::InternetGateway |
AWS::EC2::NetworkAcl | AWS::EC2::NetworkInterface | AWS::EC2::RouteTable
| AWS::EC2::SecurityGroup | AWS::EC2::Subnet | AWS::CloudTrail::Trail
| AWS::EC2::Volume | AWS::EC2::VPC | AWS::EC2::VPNConnection |
AWS::EC2::VPNGateway | AWS::IAM::Group | AWS::IAM::Policy | AWS::IAM::Role
| AWS::IAM::User | AWS::ACM::Certificate | AWS::RDS::DBInstance |
AWS::RDS::DBSubnetGroup | AWS::RDS::DBSecurityGroup | AWS::RDS::DBSnapshot |
AWS::RDS::S3::Bucket | AWS::SSM::ManagedInstanceInventory |
AWS::Redshift::Cluster | AWS::Redshift::ClusterSecurityGroup |
AWS::Redshift::ClusterParameterGroup | AWS::Redshift::ClusterSecurityGroup |
AWS::Redshift::ClusterSubnetGroup | AWS::Redshift::EventSubscription
Required: Yes
```

Response Syntax

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. 37)

The string that you use in a subsequent request to get the next page of results in a paginated response.

Type: String

resourceldentifiers (p. 37)

The details that identify a resource that is discovered by AWS Config, including the resource type, ID, and (if available) the custom resource name.

Type: array of ResourceIdentifier (p. 82) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 88).

InvalidLimitException

The specified limit is outside the allowable range.

HTTP Status Code: 400

InvalidNextTokenException

The specified next token is invalid. Specify the nextToken string that was returned in the previous response to get the next page of results.

HTTP Status Code: 400

NoAvailableConfigurationRecorderException

There are no configuration recorders available to provide the role needed to describe your resources. Create a configuration recorder.

HTTP Status Code: 400

ValidationException

The requested action is not valid.

PutConfigRule

Adds or updates an AWS Config rule for evaluating whether your AWS resources comply with your desired configurations.

You can use this action for custom Config rules and AWS managed Config rules. A custom Config rule is a rule that you develop and maintain. An AWS managed Config rule is a customizable, predefined rule that AWS Config provides.

If you are adding a new custom Config rule, you must first create the AWS Lambda function that the rule invokes to evaluate your resources. When you use the PutConfigRule action to add the rule to AWS Config, you must specify the Amazon Resource Name (ARN) that AWS Lambda assigns to the function. Specify the ARN for the SourceIdentifier key. This key is part of the Source object, which is part of the ConfigRule object.

If you are adding a new AWS managed Config rule, specify the rule's identifier for the SourceIdentifier key. To reference AWS managed Config rule identifiers, see Using AWS Managed Config Rules.

For any new rule that you add, specify the <code>ConfigRuleName</code> in the <code>ConfigRule</code> object. Do not specify the <code>ConfigRuleArn</code> or the <code>ConfigRuleId</code>. These values are generated by AWS Config for new rules.

If you are updating a rule that you added previously, you can specify the rule by ConfigRuleName, ConfigRuleId, or ConfigRuleArn in the ConfigRule data type that you use in this request.

The maximum number of rules that AWS Config supports is 50.

For more information about requesting a rule limit increase, see AWS Config Limits in the AWS General Reference Guide.

For more information about developing and using AWS Config rules, see Evaluating AWS Resource Configurations with AWS Config in the AWS Config Developer Guide.

Request Syntax

```
"ConfigRule": {
   "ConfigRuleArn": "string",
   "ConfigRuleId": "string",
   "ConfigRuleName": "string",
   "ConfigRuleState": "string",
   "Description": "string",
   "InputParameters": "string",
   "MaximumExecutionFrequency": "string",
   "Scope": {
      "ComplianceResourceId": "string",
      "ComplianceResourceTypes": [ "string" ],
      "TagKey": "string",
      "TagValue": "string"
   "Source": {
      "Owner": "string",
      "SourceDetails": [
            "EventSource": "string",
            "MaximumExecutionFrequency": "string",
            "MessageType": "string"
      1.
      "SourceIdentifier": "string"
}
```

}

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 86).

The request accepts the following data in JSON format.

ConfigRule (p. 39)

An AWS Config rule represents an AWS Lambda function that you create for a custom rule or a predefined function for an AWS managed rule. The function evaluates configuration items to assess whether your AWS resources comply with your desired configurations. This function can run when AWS Config detects a configuration change to an AWS resource and at a periodic frequency that you choose (for example, every 24 hours).

Note

You can use the AWS CLI and AWS SDKs if you want to create a rule that triggers evaluations for your resources when AWS Config delivers the configuration snapshot. For more information, see ConfigSnapshotDeliveryProperties (p. 65).

For more information about developing and using AWS Config rules, see Evaluating AWS Resource Configurations with AWS Config in the AWS Config Developer Guide.

Type: ConfigRule (p. 61) object

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. 88).

InsufficientPermissionsException

Indicates one of the following errors:

- The rule cannot be created because the IAM role assigned to AWS Config lacks permissions to perform the config:Put* action.
- The AWS Lambda function cannot be invoked. Check the function ARN, and check the function's permissions.

HTTP Status Code: 400

InvalidParameterValueException

One or more of the specified parameters are invalid. Verify that your parameters are valid and try again.

HTTP Status Code: 400

MaxNumberOfConfigRulesExceededException

Failed to add the AWS Config rule because the account already contains the maximum number of 50 rules. Consider deleting any deactivated rules before adding new rules.

HTTP Status Code: 400

NoAvailableConfigurationRecorderException

There are no configuration recorders available to provide the role needed to describe your resources. Create a configuration recorder.

HTTP Status Code: 400

ResourceInUseException

The rule is currently being deleted or the rule is deleting your evaluation results. Try your request again later.

AWS Config API Reference Errors

HTTP Status Code: 400	

PutConfigurationRecorder

Creates a new configuration recorder to record the selected resource configurations.

You can use this action to change the role roleARN and/or the recordingGroup of an existing recorder. To change the role, call the action on the existing configuration recorder and specify a role.

Note

Currently, you can specify only one configuration recorder per region in your account. If ConfigurationRecorder does not have the **recordingGroup** parameter specified, the default is to record all supported resource types.

Request Syntax

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 86).

The request accepts the following data in JSON format.

ConfigurationRecorder (p. 42)

The configuration recorder object that records each configuration change made to the resources.

Type: ConfigurationRecorder (p. 70) object

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. 88).

InvalidConfigurationRecorderNameException

You have provided a configuration recorder name that is not valid.

HTTP Status Code: 400

InvalidRecordingGroupException

AWS Config throws an exception if the recording group does not contain a valid list of resource types. Invalid values could also be incorrectly formatted.

HTTP Status Code: 400

InvalidRoleException

You have provided a null or empty role ARN.

AWS Config API Reference Errors

MaxNumberOfConfigurationRecordersExceededExceptionYou have reached the limit on the number of recorders you can create.

PutDeliveryChannel

Creates a delivery channel object to deliver configuration information to an Amazon S3 bucket and Amazon SNS topic.

Before you can create a delivery channel, you must create a configuration recorder.

You can use this action to change the Amazon S3 bucket or an Amazon SNS topic of the existing delivery channel. To change the Amazon S3 bucket or an Amazon SNS topic, call this action and specify the changed values for the S3 bucket and the SNS topic. If you specify a different value for either the S3 bucket or the SNS topic, this action will keep the existing value for the parameter that is not changed.

Note

You can have only one delivery channel per region in your account.

Request Syntax

```
{
    "DeliveryChannel": {
        "configSnapshotDeliveryProperties": {
            "deliveryFrequency": "string"
        },
        "name": "string",
        "s3BucketName": "string",
        "s3KeyPrefix": "string",
        "snsTopicARN": "string"
    }
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 86).

The request accepts the following data in JSON format.

DeliveryChannel (p. 44)

The configuration delivery channel object that delivers the configuration information to an Amazon S3 bucket, and to an Amazon SNS topic.

Type: DeliveryChannel (p. 72) object

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. 88).

InsufficientDeliveryPolicyException

Your Amazon S3 bucket policy does not permit AWS Config to write to it.

HTTP Status Code: 400

InvalidDeliveryChannelNameException

The specified delivery channel name is not valid.

AWS Config API Reference Errors

InvalidS3KeyPrefixException

The specified Amazon S3 key prefix is not valid.

HTTP Status Code: 400
InvalidSNSTopicARNException

The specified Amazon SNS topic does not exist.

HTTP Status Code: 400

MaxNumberOfDeliveryChannelsExceededException

You have reached the limit on the number of delivery channels you can create.

HTTP Status Code: 400

NoAvailableConfigurationRecorderException

There are no configuration recorders available to provide the role needed to describe your resources. Create a configuration recorder.

HTTP Status Code: 400

NoSuchBucketException

The specified Amazon S3 bucket does not exist.

PutEvaluations

Used by an AWS Lambda function to deliver evaluation results to AWS Config. This action is required in every AWS Lambda function that is invoked by an AWS Config rule.

Request Syntax

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 86).

The request accepts the following data in JSON format.

Evaluations (p. 46)

The assessments that the AWS Lambda function performs. Each evaluation identifies an AWS resource and indicates whether it complies with the AWS Config rule that invokes the AWS Lambda function.

Type: array of Evaluation (p. 75) objects

Array Members: Minimum number of 0 items. Maximum number of 100 items.

Required: No

ResultToken (p. 46)

An encrypted token that associates an evaluation with an AWS Config rule. Identifies the rule and the event that triggered the evaluation

Type: String Required: Yes

Response Syntax

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.

FailedEvaluations (p. 46)

Requests that failed because of a client or server error.

Type: array of Evaluation (p. 75) objects

Array Members: Minimum number of 0 items. Maximum number of 100 items.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 88).

InvalidParameterValueException

One or more of the specified parameters are invalid. Verify that your parameters are valid and try again.

HTTP Status Code: 400

InvalidResultTokenException

The speNexcified token is invalid.

HTTP Status Code: 400

NoSuchConfigRuleException

One or more AWS Config rules in the request are invalid. Verify that the rule names are correct

and try again.

StartConfigRulesEvaluation

Runs an on-demand evaluation for the specified Config rules against the last known configuration state of the resources. Use StartConfigRulesEvaluation when you want to test a rule that you updated is working as expected. StartConfigRulesEvaluation does not re-record the latest configuration state for your resources; it re-runs an evaluation against the last known state of your resources.

You can specify up to 25 Config rules per request.

An existing StartConfigRulesEvaluation call must complete for the specified rules before you can call the API again. If you chose to have AWS Config stream to an Amazon SNS topic, you will receive a ConfigRuleEvaluationStarted notification when the evaluation starts.

Note

You don't need to call the StartConfigRulesEvaluation API to run an evaluation for a new rule. When you create a new rule, AWS Config automatically evaluates your resources against the rule.

The StartConfigRulesEvaluation API is useful if you want to run on-demand evaluations, such as the following example:

- 1. You have a custom rule that evaluates your IAM resources every 24 hours.
- 2. You update your Lambda function to add additional conditions to your rule.
- 3. Instead of waiting for the next periodic evaluation, you call the StartConfigRulesEvaluation API.
- 4. AWS Config invokes your Lambda function and evaluates your IAM resources.
- 5. Your custom rule will still run periodic evaluations every 24 hours.

Request Syntax

```
{
    "ConfigRuleNames": [ "string" ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 86).

The request accepts the following data in JSON format.

ConfigRuleNames (p. 48)

The list of names of Config rules that you want to run evaluations for.

Type: array of Strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

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

Required: No

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. 88).

AWS Config API Reference Errors

InvalidParameterValueException

One or more of the specified parameters are invalid. Verify that your parameters are valid and try again.

HTTP Status Code: 400 LimitExceededException

This exception is thrown if an evaluation is in progress or if you call the StartConfigRulesEvaluation (p. 48) API more than once per minute.

HTTP Status Code: 400

NoSuchConfigRuleException

One or more AWS Config rules in the request are invalid. Verify that the rule names are correct

and try again.

HTTP Status Code: 400 ResourceInUseException

The rule is currently being deleted or the rule is deleting your evaluation results. Try your request

again later.

StartConfigurationRecorder

Starts recording configurations of the AWS resources you have selected to record in your AWS account.

You must have created at least one delivery channel to successfully start the configuration recorder.

Request Syntax

```
{
    "ConfigurationRecorderName": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 86).

The request accepts the following data in JSON format.

ConfigurationRecorderName (p. 50)

The name of the recorder object that records each configuration change made to the resources.

Type: String

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

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. 88).

NoAvailableDeliveryChannelException

There is no delivery channel available to record configurations.

HTTP Status Code: 400

NoSuchConfigurationRecorderException

You have specified a configuration recorder that does not exist.

StopConfigurationRecorder

Stops recording configurations of the AWS resources you have selected to record in your AWS account.

Request Syntax

```
{
    "ConfigurationRecorderName": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 86).

The request accepts the following data in JSON format.

ConfigurationRecorderName (p. 51)

The name of the recorder object that records each configuration change made to the resources.

Type: String

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

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. 88).

NoSuchConfigurationRecorderException

You have specified a configuration recorder that does not exist.

Data Types

The AWS Config 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:

- Compliance (p. 54)
- ComplianceByConfigRule (p. 55)
- ComplianceByResource (p. 56)
- ComplianceContributorCount (p. 57)
- ComplianceSummary (p. 58)
- ComplianceSummaryByResourceType (p. 59)
- ConfigExportDeliveryInfo (p. 60)
- ConfigRule (p. 61)
- ConfigRuleEvaluationStatus (p. 63)
- ConfigSnapshotDeliveryProperties (p. 65)
- ConfigStreamDeliveryInfo (p. 66)
- ConfigurationItem (p. 67)
- ConfigurationRecorder (p. 70)
- ConfigurationRecorderStatus (p. 71)
- DeliveryChannel (p. 72)
- DeliveryChannelStatus (p. 74)
- Evaluation (p. 75)
- EvaluationResult (p. 76)
- EvaluationResultIdentifier (p. 77)
- EvaluationResultQualifier (p. 78)
- RecordingGroup (p. 79)
- Relationship (p. 81)
- ResourceIdentifier (p. 82)
- Scope (p. 83)
- Source (p. 84)

• SourceDetail (p. 85)

Compliance

Indicates whether an AWS resource or AWS Config rule is compliant and provides the number of contributors that affect the compliance.

Contents

ComplianceContributorCount

The number of AWS resources or AWS Config rules that cause a result of ${\tt NON_COMPLIANT}$, up to a maximum number.

Type: ComplianceContributorCount (p. 57) object

Required: No

ComplianceType

Indicates whether an AWS resource or AWS Config rule is compliant.

A resource is compliant if it complies with all of the AWS Config rules that evaluate it, and it is noncompliant if it does not comply with one or more of these rules.

A rule is compliant if all of the resources that the rule evaluates comply with it, and it is noncompliant if any of these resources do not comply.

AWS Config returns the INSUFFICIENT_DATA value when no evaluation results are available for the AWS resource or Config rule.

For the Compliance data type, AWS Config supports only COMPLIANT, NON_COMPLIANT, and INSUFFICIENT_DATA values. AWS Config does not support the NOT_APPLICABLE value for the Compliance data type.

Type: String

Valid Values: COMPLIANT | NON_COMPLIANT | NOT_APPLICABLE | INSUFFICIENT_DATA

ComplianceByConfigRule

Indicates whether an AWS Config rule is compliant. A rule is compliant if all of the resources that the rule evaluated comply with it, and it is noncompliant if any of these resources do not comply.

Contents

Compliance

Indicates whether the AWS Config rule is compliant.

Type: Compliance (p. 54) object

Required: No ConfigRuleName

The name of the AWS Config rule.

Type: String

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

ComplianceByResource

Indicates whether an AWS resource that is evaluated according to one or more AWS Config rules is compliant. A resource is compliant if it complies with all of the rules that evaluate it, and it is noncompliant if it does not comply with one or more of these rules.

Contents

Compliance

Indicates whether the AWS resource complies with all of the AWS Config rules that evaluated it.

Type: Compliance (p. 54) object

Required: No

Resourceld

The ID of the AWS resource that was evaluated.

Type: String

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

Required: No

ResourceType

The type of the AWS resource that was evaluated.

Type: String

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

ComplianceContributorCount

The number of AWS resources or AWS Config rules responsible for the current compliance of the item, up to a maximum number.

Contents

CapExceeded

Indicates whether the maximum count is reached.

Type: Boolean Required: No

CappedCount

The number of AWS resources or AWS Config rules responsible for the current compliance of the

item.

Type: Integer Required: No

ComplianceSummary

The number of AWS Config rules or AWS resources that are compliant and noncompliant.

Contents

ComplianceSummaryTimestamp

The time that AWS Config created the compliance summary.

Type: Timestamp Required: No

CompliantResourceCount

The number of AWS Config rules or AWS resources that are compliant, up to a maximum of 25 for rules and 100 for resources.

Type: ComplianceContributorCount (p. 57) object

Required: No

NonCompliantResourceCount

The number of AWS Config rules or AWS resources that are noncompliant, up to a maximum of 25 for rules and 100 for resources.

Type: ComplianceContributorCount (p. 57) object

ComplianceSummaryByResourceType

The number of AWS resources of a specific type that are compliant or noncompliant, up to a maximum of 100 for each compliance.

Contents

ComplianceSummary

The number of AWS resources that are compliant or noncompliant, up to a maximum of 100 for each compliance.

Type: ComplianceSummary (p. 58) object

Required: No

ResourceType

The type of AWS resource.

Type: String

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

ConfigExportDeliveryInfo

A list that contains the status of the delivery of either the snapshot or the configuration history to the specified Amazon S3 bucket.

Contents

lastAttemptTime

The time of the last attempted delivery.

Type: Timestamp Required: No lastErrorCode

The error code from the last attempted delivery.

Type: String Required: No lastErrorMessage

The error message from the last attempted delivery.

Type: String Required: No

lastStatus

Status of the last attempted delivery.

Type: String

Valid Values: Success | Failure | Not_Applicable

Required: No lastSuccessfulTime

The time of the last successful delivery.

Type: Timestamp Required: No nextDeliveryTime

The time that the next delivery occurs.

Type: Timestamp Required: No

ConfigRule

An AWS Config rule represents an AWS Lambda function that you create for a custom rule or a predefined function for an AWS managed rule. The function evaluates configuration items to assess whether your AWS resources comply with your desired configurations. This function can run when AWS Config detects a configuration change to an AWS resource and at a periodic frequency that you choose (for example, every 24 hours).

Note

You can use the AWS CLI and AWS SDKs if you want to create a rule that triggers evaluations for your resources when AWS Config delivers the configuration snapshot. For more information, see ConfigSnapshotDeliveryProperties (p. 65).

For more information about developing and using AWS Config rules, see Evaluating AWS Resource Configurations with AWS Config in the AWS Config Developer Guide.

Contents

ConfigRuleArn

The Amazon Resource Name (ARN) of the AWS Config rule.

Type: String Required: No

ConfigRuleId

The ID of the AWS Config rule.

Type: String Required: No

ConfigRuleName

The name that you assign to the AWS Config rule. The name is required if you are adding a new rule.

Type: String

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

Required: No

ConfigRuleState

Indicates whether the AWS Config rule is active or is currently being deleted by AWS Config. It can also indicate the evaluation status for the Config rule.

AWS Config sets the state of the rule to EVALUATING temporarily after you use the StartConfigRulesEvaluation request to evaluate your resources against the Config rule.

AWS Config sets the state of the rule to <code>DELETING_RESULTS</code> temporarily after you use the <code>DeleteEvaluationResults</code> request to delete the current evaluation results for the Config rule.

AWS Config sets the state of a rule to DELETING temporarily after you use the DeleteConfigRule request to delete the rule. After AWS Config deletes the rule, the rule and all of its evaluations are erased and are no longer available.

Type: String

Valid Values: ACTIVE | DELETING | DELETING_RESULTS | EVALUATING

Required: No

Description

The description that you provide for the AWS Config rule.

Type: String

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

Required: No InputParameters

A string in JSON format that is passed to the AWS Config rule Lambda function.

Type: String

AWS Config API Reference Contents

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

Required: No

MaximumExecutionFrequency

The maximum frequency with which AWS Config runs evaluations for a rule. You can specify a value for MaximumExecutionFrequency when:

- You are using an AWS managed rule that is triggered at a periodic frequency.
- Your custom rule is triggered when AWS Config delivers the configuration snapshot.

For more information, see ConfigSnapshotDeliveryProperties (p. 65).

Type: String

Valid Values: One_Hour | Three_Hours | Six_Hours | Twelve_Hours |

TwentyFour_Hours

Required: No

Scope

Defines which resources can trigger an evaluation for the rule. The scope can include one or more resource types, a combination of one resource type and one resource ID, or a combination of a tag key and value. Specify a scope to constrain the resources that can trigger an evaluation for the rule. If you do not specify a scope, evaluations are triggered when any resource in the recording group changes.

Type: Scope (p. 83) object

Required: No

Source

Provides the rule owner (AWS or customer), the rule identifier, and the notifications that cause the function to evaluate your AWS resources.

Type: Source (p. 84) object

Required: Yes

ConfigRuleEvaluationStatus

Status information for your AWS managed Config rules. The status includes information such as the last time the rule ran, the last time it failed, and the related error for the last failure.

This action does not return status information about custom Config rules.

Contents

ConfigRuleArn

The Amazon Resource Name (ARN) of the AWS Config rule.

Type: String Required: No

ConfigRuleId

The ID of the AWS Config rule.

Type: String Required: No ConfigRuleName

The name of the AWS Config rule.

Type: String

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

Required: No FirstActivatedTime

The time that you first activated the AWS Config rule.

Type: Timestamp Required: No

FirstEvaluationStarted

Indicates whether AWS Config has evaluated your resources against the rule at least once.

- true AWS Config has evaluated your AWS resources against the rule at least once.
- false AWS Config has not once finished evaluating your AWS resources against the rule.

Type: Boolean Required: No

LastErrorCode

The error code that AWS Config returned when the rule last failed.

Type: String Required: No LastErrorMessage

The error message that AWS Config returned when the rule last failed.

Type: String Required: No

LastFailedEvaluationTime

The time that AWS Config last failed to evaluate your AWS resources against the rule.

Type: Timestamp Required: No

LastFailedInvocationTime

The time that AWS Config last failed to invoke the AWS Config rule to evaluate your AWS resources.

Type: Timestamp Required: No

LastSuccessfulEvaluationTime

The time that AWS Config last successfully evaluated your AWS resources against the rule.

AWS Config API Reference Contents

Type: Timestamp Required: No

LastSuccessfulInvocationTime

The time that AWS Config last successfully invoked the AWS Config rule to evaluate your AWS

resources.

Type: Timestamp Required: No

ConfigSnapshotDeliveryProperties

Provides options for how often AWS Config delivers configuration snapshots to the Amazon S3 bucket in your delivery channel.

Note

If you want to create a rule that triggers evaluations for your resources when AWS Config delivers the configuration snapshot, see the following:

The frequency for a rule that triggers evaluations for your resources when AWS Config delivers the configuration snapshot is set by one of two values, depending on which is less frequent:

- The value for the deliveryFrequency parameter within the delivery channel configuration, which sets how often AWS Config delivers configuration snapshots. This value also sets how often AWS Config invokes evaluations for Config rules.
- The value for the MaximumExecutionFrequency parameter, which sets the maximum frequency with which AWS Config invokes evaluations for the rule. For more information, see ConfigRule (p. 61).

If the deliveryFrequency value is less frequent than the MaximumExecutionFrequency value for a rule, AWS Config invokes the rule only as often as the deliveryFrequency value.

- For example, you want your rule to run evaluations when AWS Config delivers the configuration snapshot.
- 2. You specify the MaximumExecutionFrequency value for Six_Hours.
- 3. You then specify the delivery channel delivery Frequency value for Twenty Four_Hours.
- 4. Because the value for deliveryFrequency is less frequent than MaximumExecutionFrequency, AWS Config invokes evaluations for the rule every 24 hours.

You should set the MaximumExecutionFrequency value to be at least as frequent as the deliveryFrequency value. You can view the deliveryFrequency value by using the DescribeDeliveryChannnels action.

To update the deliveryFrequency with which AWS Config delivers your configuration snapshots, use the PutDeliveryChannel action.

Contents

deliveryFrequency

The frequency with which AWS Config delivers configuration snapshots.

Type: String

Valid Values: One_Hour | Three_Hours | Six_Hours | Twelve_Hours |

TwentyFour_Hours

ConfigStreamDeliveryInfo

A list that contains the status of the delivery of the configuration stream notification to the Amazon SNS topic.

Contents

lastErrorCode

The error code from the last attempted delivery.

Type: String Required: No

lastErrorMessage

The error message from the last attempted delivery.

Type: String Required: No

lastStatus

Status of the last attempted delivery.

Note Providing an SNS topic on a DeliveryChannel for AWS Config is optional. If the SNS delivery is turned off, the last status will be **Not_Applicable**.

Type: String

Valid Values: Success | Failure | Not_Applicable

Required: No

lastStatusChangeTime

The time from the last status change.

Type: Timestamp Required: No

ConfigurationItem

A list that contains detailed configurations of a specified resource.

Note

Currently, the list does not contain information about non-AWS components (for example, applications on your Amazon EC2 instances).

Contents

accountld

The 12 digit AWS account ID associated with the resource.

Type: String Required: No

arn

The Amazon Resource Name (ARN) of the resource.

Type: String Required: No availabilityZone

The Availability Zone associated with the resource.

Type: String Required: No

awsRegion

The region where the resource resides.

Type: String Required: No

configuration

The description of the resource configuration.

Type: String Required: No

configurationItemCaptureTime

The time when the configuration recording was initiated.

Type: Timestamp Required: No

configurationItemMD5Hash

Unique MD5 hash that represents the configuration item's state.

You can use MD5 hash to compare the states of two or more configuration items that are associated with the same resource.

Type: String Required: No

configurationItemStatus

The configuration item status.

Type: String

Valid Values: Ok | Failed | Discovered | Deleted

Required: No configurationStateId

An identifier that indicates the ordering of the configuration items of a resource.

Type: String Required: No

relatedEvents

A list of CloudTrail event IDs.

AWS Config API Reference Contents

A populated field indicates that the current configuration was initiated by the events recorded in the CloudTrail log. For more information about CloudTrail, see What is AWS CloudTrail?.

An empty field indicates that the current configuration was not initiated by any event.

Type: array of Strings

Required: No

relationships

A list of related AWS resources.

Type: array of Relationship (p. 81) objects

Required: No

resourceCreationTime

The time stamp when the resource was created.

Type: Timestamp Required: No

resourceld

The ID of the resource (for example., sq-xxxxxx).

Type: String Required: No

resourceName

The custom name of the resource, if available.

Type: String Required: No

resourceType

The type of AWS resource.

Type: String

```
Valid Values: AWS::EC2::CustomerGateway | AWS::EC2::EIP |
AWS::EC2::Host | AWS::EC2::Instance | AWS::EC2::InternetGateway |
AWS::EC2::NetworkAcl | AWS::EC2::NetworkInterface | AWS::EC2::RouteTable
| AWS::EC2::SecurityGroup | AWS::EC2::Subnet | AWS::CloudTrail::Trail
| AWS::EC2::Volume | AWS::EC2::VPC | AWS::EC2::VPNConnection |
AWS::EC2::VPNGateway | AWS::IAM::Group | AWS::IAM::Policy | AWS::IAM::Role
| AWS::IAM::User | AWS::ACM::Certificate | AWS::RDS::DBInstance |
AWS::RDS::DBSubnetGroup | AWS::RDS::DBSecurityGroup | AWS::RDS::DBSnapshot
| AWS::RDS::EventSubscription | AWS::ElasticLoadBalancingV2::LoadBalancer
| AWS::S3::Bucket | AWS::SSM::ManagedInstanceInventory |
AWS::Redshift::Cluster | AWS::Redshift::ClusterSecurityGroup | AWS::Redshift::EventSubscription
```

supplementaryConfiguration

Configuration attributes that AWS Config returns for certain resource types to supplement the information returned for the configuration parameter.

Type: String to String map

Required: No

tags

A mapping of key value tags associated with the resource.

Type: String to String map

Required: No

version

The version number of the resource configuration.

Type: String Required: No

AWS Config API Reference Contents

ConfigurationRecorder

An object that represents the recording of configuration changes of an AWS resource.

Contents

name

The name of the recorder. By default, AWS Config automatically assigns the name "default" when creating the configuration recorder. You cannot change the assigned name.

Type: String

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

Required: No recordingGroup

Specifies the types of AWS resource for which AWS Config records configuration changes.

Type: RecordingGroup (p. 79) object

Required: No

roleARN

Amazon Resource Name (ARN) of the IAM role used to describe the AWS resources associated with the account.

Type: String Required: No

ConfigurationRecorderStatus

The current status of the configuration recorder.

Contents

lastErrorCode

The error code indicating that the recording failed.

Type: String Required: No lastErrorMessage

The message indicating that the recording failed due to an error.

Type: String Required: No

lastStartTime

The time the recorder was last started.

Type: Timestamp Required: No

lastStatus

The last (previous) status of the recorder.

Type: String

Valid Values: Pending | Success | Failure

Required: No

lastStatusChangeTime

The time when the status was last changed.

Type: Timestamp Required: No lastStopTime

The time the recorder was last stopped.

Type: Timestamp Required: No

name

The name of the configuration recorder.

Type: String Required: No

recording

Specifies whether the recorder is currently recording or not.

Type: Boolean Required: No

DeliveryChannel

The channel through which AWS Config delivers notifications and updated configuration states.

Contents

configSnapshotDeliveryProperties

Provides options for how often AWS Config delivers configuration snapshots to the Amazon S3 bucket in your delivery channel.

Note

If you want to create a rule that triggers evaluations for your resources when AWS Config delivers the configuration snapshot, see the following:

The frequency for a rule that triggers evaluations for your resources when AWS Config delivers the configuration snapshot is set by one of two values, depending on which is less frequent:

- The value for the deliveryFrequency parameter within the delivery channel configuration, which sets how often AWS Config delivers configuration snapshots. This value also sets how often AWS Config invokes evaluations for Config rules.
- The value for the MaximumExecutionFrequency parameter, which sets the maximum frequency with which AWS Config invokes evaluations for the rule. For more information, see ConfigRule (p. 61).

If the deliveryFrequency value is less frequent than the MaximumExecutionFrequency value for a rule, AWS Config invokes the rule only as often as the deliveryFrequency value.

- For example, you want your rule to run evaluations when AWS Config delivers the configuration snapshot.
- 2. You specify the MaximumExecutionFrequency value for Six_Hours.
- 3. You then specify the delivery channel delivery Frequency value for Twenty Four_Hours.
- 4. Because the value for deliveryFrequency is less frequent than MaximumExecutionFrequency, AWS Config invokes evaluations for the rule every 24 hours.

You should set the MaximumExecutionFrequency value to be at least as frequent as the deliveryFrequency value. You can view the deliveryFrequency value by using the DescribeDeliveryChannnels action.

To update the deliveryFrequency with which AWS Config delivers your configuration snapshots, use the PutDeliveryChannel action.

Type: ConfigSnapshotDeliveryProperties (p. 65) object

Required: No

name

The name of the delivery channel. By default, AWS Config assigns the name "default" when creating the delivery channel. To change the delivery channel name, you must use the DeleteDeliveryChannel action to delete your current delivery channel, and then you must use the PutDeliveryChannel command to create a delivery channel that has the desired name.

Type: String

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

Required: No

s3BucketName

The name of the Amazon S3 bucket to which AWS Config delivers configuration snapshots and configuration history files.

If you specify a bucket that belongs to another AWS account, that bucket must have policies that grant access permissions to AWS Config. For more information, see Permissions for the Amazon S3 Bucket in the AWS Config Developer Guide.

Type: String Required: No

AWS Config API Reference Contents

s3KeyPrefix

The prefix for the specified Amazon S3 bucket.

Type: String Required: No

snsTopicARN

The Amazon Resource Name (ARN) of the Amazon SNS topic to which AWS Config sends notifications about configuration changes.

If you choose a topic from another account, the topic must have policies that grant access permissions to AWS Config. For more information, see Permissions for the Amazon SNS Topic in the AWS Config Developer Guide.

Type: String Required: No

DeliveryChannelStatus

The status of a specified delivery channel.

Valid values: Success | Failure

Contents

configHistoryDeliveryInfo

A list that contains the status of the delivery of the configuration history to the specified Amazon S3 bucket.

Type: ConfigExportDeliveryInfo (p. 60) object

Required: No

configSnapshotDeliveryInfo

A list containing the status of the delivery of the snapshot to the specified Amazon S3 bucket.

Type: ConfigExportDeliveryInfo (p. 60) object

Required: No

configStreamDeliveryInfo

A list containing the status of the delivery of the configuration stream notification to the specified Amazon SNS topic.

Type: ConfigStreamDeliveryInfo (p. 66) object

Required: No

name

The name of the delivery channel.

Type: String Required: No

Evaluation

Identifies an AWS resource and indicates whether it complies with the AWS Config rule that it was evaluated against.

Contents

Annotation

Supplementary information about how the evaluation determined the compliance.

Type: String

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

Required: No

ComplianceResourceld

The ID of the AWS resource that was evaluated.

Type: String

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

Required: Yes

ComplianceResourceType

The type of AWS resource that was evaluated.

Type: String

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

Required: Yes

ComplianceType

Indicates whether the AWS resource complies with the AWS Config rule that it was evaluated against.

For the Evaluation data type, AWS Config supports only the COMPLIANT, NON_COMPLIANT, and NOT_APPLICABLE values. AWS Config does not support the INSUFFICIENT_DATA value for this data type.

Similarly, AWS Config does not accept INSUFFICIENT_DATA as the value for ComplianceType from a PutEvaluations request. For example, an AWS Lambda function for a custom Config rule cannot pass an INSUFFICIENT_DATA value to AWS Config.

Type: String

Valid Values: COMPLIANT | NON_COMPLIANT | NOT_APPLICABLE | INSUFFICIENT_DATA

Required: Yes

OrderingTimestamp

The time of the event in AWS Config that triggered the evaluation. For event-based evaluations, the time indicates when AWS Config created the configuration item that triggered the evaluation. For periodic evaluations, the time indicates when AWS Config triggered the evaluation at the frequency that you specified (for example, every 24 hours).

Type: Timestamp Required: Yes

EvaluationResult

The details of an AWS Config evaluation. Provides the AWS resource that was evaluated, the compliance of the resource, related timestamps, and supplementary information.

Contents

Annotation

Supplementary information about how the evaluation determined the compliance.

Type: String

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

Required: No

ComplianceType

Indicates whether the AWS resource complies with the AWS Config rule that evaluated it.

For the EvaluationResult data type, AWS Config supports only the COMPLIANT, NON_COMPLIANT, and NOT_APPLICABLE values. AWS Config does not support the INSUFFICIENT_DATA value for the EvaluationResult data type.

Type: String

Valid Values: COMPLIANT | NON_COMPLIANT | NOT_APPLICABLE | INSUFFICIENT_DATA

Required: No

ConfigRuleInvokedTime

The time when the AWS Config rule evaluated the AWS resource.

Type: Timestamp Required: No

EvaluationResultIdentifier

Uniquely identifies the evaluation result.

Type: EvaluationResultIdentifier (p. 77) object

Required: No

ResultRecordedTime

The time when AWS Config recorded the evaluation result.

Type: Timestamp Required: No

ResultToken

An encrypted token that associates an evaluation with an AWS Config rule. The token identifies the rule, the AWS resource being evaluated, and the event that triggered the evaluation.

Type: String Required: No

EvaluationResultIdentifier

Uniquely identifies an evaluation result.

Contents

EvaluationResultQualifier

Identifies an AWS Config rule used to evaluate an AWS resource, and provides the type and ID of the evaluated resource.

Type: EvaluationResultQualifier (p. 78) object

Required: No **OrderingTimestamp**

The time of the event that triggered the evaluation of your AWS resources. The time can indicate when AWS Config delivered a configuration item change notification, or it can indicate when AWS Config delivered the configuration snapshot, depending on which event triggered the evaluation.

Type: Timestamp Required: No

EvaluationResultQualifier

Identifies an AWS Config rule that evaluated an AWS resource, and provides the type and ID of the resource that the rule evaluated.

Contents

ConfigRuleName

The name of the AWS Config rule that was used in the evaluation.

Type: String

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

Required: No

Resourceld

The ID of the evaluated AWS resource.

Type: String

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

Required: No

ResourceType

The type of AWS resource that was evaluated.

Type: String

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

Required: No

RecordingGroup

Specifies the types of AWS resource for which AWS Config records configuration changes. In the recording group, you specify whether all supported types or specific types of resources are recorded.

By default, AWS Config records configuration changes for all supported types of regional resources that AWS Config discovers in the region in which it is running. Regional resources are tied to a region and can be used only in that region. Examples of regional resources are EC2 instances and EBS volumes.

You can also have AWS Config record configuration changes for supported types of global resources (for example, IAM resources). Global resources are not tied to an individual region and can be used in all regions.

Important

The configuration details for any global resource are the same in all regions. If you customize AWS Config in multiple regions to record global resources, it will create multiple configuration items each time a global resource changes: one configuration item for each region. These configuration items will contain identical data. To prevent duplicate configuration items, you should consider customizing AWS Config in only one region to record global resources, unless you want the configuration items to be available in multiple regions.

If you don't want AWS Config to record all resources, you can specify which types of resources it will record with the resourceTypes parameter.

For a list of supported resource types, see Supported resource types.

For more information, see Selecting Which Resources AWS Config Records.

Contents

allSupported

Specifies whether AWS Config records configuration changes for every supported type of regional resource

If you set this option to true, when AWS Config adds support for a new type of regional resource, it automatically starts recording resources of that type.

If you set this option to true, you cannot enumerate a list of resourceTypes.

Type: Boolean Required: No

includeGlobalResourceTypes

Specifies whether AWS Config includes all supported types of global resources (for example, IAM resources) with the resources that it records.

Before you can set this option to true, you must set the all Supported option to true.

If you set this option to true, when AWS Config adds support for a new type of global resource, it automatically starts recording resources of that type.

The configuration details for any global resource are the same in all regions. To prevent duplicate configuration items, you should consider customizing AWS Config in only one region to record global resources.

Type: Boolean Required: No

resourceTypes

A comma-separated list that specifies the types of AWS resources for which AWS Config records configuration changes (for example, AWS::EC2::Instance or AWS::CloudTrail::Trail).

Before you can set this option to true, you must set the all Supported option to false.

If you set this option to true, when AWS Config adds support for a new type of resource, it will not record resources of that type unless you manually add that type to your recording group.

AWS Config API Reference Contents

For a list of valid resourceTypes values, see the **resourceType Value** column in Supported AWS Resource Types.

```
Type: array of Strings
```

```
Valid Values: AWS::EC2::CustomerGateway | AWS::EC2::EIP |
AWS::EC2::Host | AWS::EC2::Instance | AWS::EC2::InternetGateway |
AWS::EC2::NetworkAcl | AWS::EC2::NetworkInterface | AWS::EC2::RouteTable |
AWS::EC2::SecurityGroup | AWS::EC2::Subnet | AWS::CloudTrail::Trail |
AWS::EC2::Volume | AWS::EC2::VPC | AWS::EC2::VPNConnection |
AWS::EC2::VPNGateway | AWS::IAM::Group | AWS::IAM::Policy | AWS::IAM::Role |
AWS::IAM::User | AWS::ACM::Certificate | AWS::RDS::DBInstance |
AWS::RDS::DBSubnetGroup | AWS::RDS::DBSecurityGroup | AWS::RDS::DBSnapshot |
AWS::RDS::EventSubscription | AWS::ElasticLoadBalancingV2::LoadBalancer |
AWS::S3::Bucket | AWS::SSM::ManagedInstanceInventory |
AWS::Redshift::Cluster | AWS::Redshift::ClusterSnapshot |
AWS::Redshift::ClusterParameterGroup | AWS::Redshift::ClusterSecurityGroup |
AWS::Redshift::ClusterSubnetGroup | AWS::Redshift::EventSubscription |
Required: No
```

Relationship

The relationship of the related resource to the main resource.

Contents

relationshipName

The type of relationship with the related resource.

Type: String Required: No

resourceld

The ID of the related resource (for example, sg-xxxxxx).

Type: String Required: No

resourceName

The custom name of the related resource, if available.

Type: String Required: No

resourceType

The resource type of the related resource.

Type: String

```
Valid Values: AWS::EC2::CustomerGateway | AWS::EC2::EIP |
AWS::EC2::Host | AWS::EC2::Instance | AWS::EC2::InternetGateway |
AWS::EC2::NetworkAcl | AWS::EC2::NetworkInterface | AWS::EC2::RouteTable |
AWS::EC2::SecurityGroup | AWS::EC2::Subnet | AWS::CloudTrail::Trail |
AWS::EC2::Volume | AWS::EC2::VPC | AWS::EC2::VPNConnection |
AWS::EC2::VPNGateway | AWS::IAM::Group | AWS::IAM::Policy | AWS::IAM::Role |
AWS::IAM::User | AWS::ACM::Certificate | AWS::RDS::DBInstance |
AWS::RDS::DBSubnetGroup | AWS::RDS::DBSecurityGroup | AWS::RDS::DBSnapshot |
AWS::RDS::EventSubscription | AWS::ElasticLoadBalancingV2::LoadBalancer |
AWS::S3::Bucket | AWS::SSM::ManagedInstanceInventory |
AWS::Redshift::Cluster | AWS::Redshift::ClusterSnapshot |
AWS::Redshift::ClusterParameterGroup | AWS::Redshift::ClusterSecurityGroup |
AWS::Redshift::ClusterSubnetGroup | AWS::Redshift::EventSubscription |
Required: No
```

ResourceIdentifier

The details that identify a resource that is discovered by AWS Config, including the resource type, ID, and (if available) the custom resource name.

Contents

resourceDeletionTime

The time that the resource was deleted.

Type: Timestamp Required: No

resourceld

The ID of the resource (for example., sg-xxxxxx).

Type: String Required: No resourceName

The custom name of the resource (if available).

Type: String Required: No

resourceType

The type of resource.

Type: String

```
Valid Values: AWS::EC2::CustomerGateway | AWS::EC2::EIP |
AWS::EC2::Host | AWS::EC2::Instance | AWS::EC2::InternetGateway |
AWS::EC2::NetworkAcl | AWS::EC2::NetworkInterface | AWS::EC2::RouteTable |
AWS::EC2::SecurityGroup | AWS::EC2::Subnet | AWS::CloudTrail::Trail |
AWS::EC2::Volume | AWS::EC2::VPC | AWS::EC2::VPNConnection |
AWS::EC2::VPNGateway | AWS::IAM::Group | AWS::IAM::Policy | AWS::IAM::Role |
AWS::IAM::User | AWS::ACM::Certificate | AWS::RDS::DBInstance |
AWS::RDS::DBSubnetGroup | AWS::RDS::DBSecurityGroup | AWS::RDS::DBSnapshot |
AWS::RDS::EventSubscription | AWS::ElasticLoadBalancingV2::LoadBalancer |
AWS::S3::Bucket | AWS::SSM::ManagedInstanceInventory |
AWS::Redshift::Cluster | AWS::Redshift::ClusterSecurityGroup |
AWS::Redshift::ClusterParameterGroup | AWS::Redshift::ClusterSecurityGroup |
AWS::Redshift::ClusterSubnetGroup | AWS::Redshift::EventSubscription |
Required: No
```

Scope

Defines which resources trigger an evaluation for an AWS Config rule. The scope can include one or more resource types, a combination of a tag key and value, or a combination of one resource type and one resource ID. Specify a scope to constrain which resources trigger an evaluation for a rule. Otherwise, evaluations for the rule are triggered when any resource in your recording group changes in configuration.

Contents

ComplianceResourceld

The IDs of the only AWS resource that you want to trigger an evaluation for the rule. If you specify a resource ID, you must specify one resource type for ComplianceResourceTypes.

Type: String

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

Required: No

ComplianceResourceTypes

The resource types of only those AWS resources that you want to trigger an evaluation for the rule. You can only specify one type if you also specify a resource ID for ComplianceResourceId.

Type: array of Strings

Array Members: Minimum number of 0 items. Maximum number of 100 items.

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

Required: No

TagKey

The tag key that is applied to only those AWS resources that you want you want to trigger an evaluation for the rule.

Type: String

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

Required: No

TagValue

The tag value applied to only those AWS resources that you want to trigger an evaluation for the rule. If you specify a value for TagValue, you must also specify a value for TagVey.

Type: String

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

Required: No

Source

Provides the AWS Config rule owner (AWS or customer), the rule identifier, and the events that trigger the evaluation of your AWS resources.

Contents

Owner

Indicates whether AWS or the customer owns and manages the AWS Config rule.

Type: String

Valid Values: CUSTOM_LAMBDA | AWS

Required: Yes

SourceDetails

Provides the source and type of the event that causes AWS Config to evaluate your AWS

resources.

Type: array of SourceDetail (p. 85) objects

Array Members: Minimum number of 0 items. Maximum number of 25 items.

Required: No

Sourceldentifier

For AWS Config managed rules, a predefined identifier from a list. For example, IAM_PASSWORD_POLICY is a managed rule. To reference a managed rule, see Using AWS Managed Config Rules.

For custom rules, the identifier is the Amazon Resource Name (ARN) of the rule's AWS Lambda function, such as arn:aws:lambda:us-east-1:123456789012:function:custom_rule_name.

Type: String

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

Required: Yes

SourceDetail

Provides the source and the message types that trigger AWS Config to evaluate your AWS resources against a rule. It also provides the frequency with which you want AWS Config to run evaluations for the rule if the trigger type is periodic. You can specify the parameter values for <code>SourceDetail</code> only for custom rules.

Contents

EventSource

The source of the event, such as an AWS service, that triggers AWS Config to evaluate your AWS resources.

Type: String

Valid Values: aws.config

Required: No

MaximumExecutionFrequency

The frequency that you want AWS Config to run evaluations for a rule that is triggered periodically. If you specify a value for MaximumExecutionFrequency, then MessageType must use the ScheduledNotification value.

Type: String

Valid Values: One_Hour | Three_Hours | Six_Hours | Twelve_Hours |

TwentyFour_Hours

Required: No

MessageType

The type of notification that triggers AWS Config to run an evaluation. You can specify the following notification types:

 ${\tt ConfigurationItemChangeNotification - Triggers \ an \ evaluation \ when \ AWS \ Config \ delivers \ a \ configuration \ item \ change \ notification.}$

ScheduledNotification - Triggers a periodic evaluation at the frequency specified for MaximumExecutionFrequency.

ConfigurationSnapshotDeliveryCompleted - Triggers a periodic evaluation when AWS Config delivers a configuration snapshot.

Type: String

Valid Values: ConfigurationItemChangeNotification |

 ${\tt ConfigurationSnapshotDeliveryCompleted} \ | \ {\tt ScheduledNotification}$

Required: No

Common Parameters

The following table lists the parameters that all actions use for signing Signature Version 4 requests. Any action-specific parameters are listed in the topic for that action. To view sample requests, see Examples of Signed Signature Version 4 Requests or Signature Version 4 Test Suite in the *Amazon Web Services General Reference*.

Action

The action to be performed.

Type: string

Required: Yes

Version

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

Type: string

Required: Yes

X-Amz-Algorithm

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

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

Type: string

Valid Values: AWS4-HMAC-SHA256

Required: Conditional

X-Amz-Credential

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

For more information, see Task 2: Create a String to Sign for Signature Version 4 in the *Amazon Web Services General Reference*.

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

Type: string

Required: Conditional

X-Amz-Date

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

Condition: X-Amz-Date is optional for all requests; it can be used to override the date used for signing requests. If the Date header is specified in the ISO 8601 basic format, X-Amz-Date is not required. When X-Amz-Date is used, it always overrides the value of the Date header. For more information, see Handling Dates in Signature Version 4 in the Amazon Web Services General Reference.

Type: string

Required: Conditional

X-Amz-Security-Token

The temporary security token that was obtained through a call to AWS Security Token Service. For a list of services that support AWS Security Token Service, go to Using Temporary Security Credentials to Access AWS in *Using Temporary Security Credentials*.

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 common errors that all actions return. Any action-specific errors are listed in the topic for the action.

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

Throttling

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