
Amazon CodeGuru

API Reference

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Amazon CodeGuru: API Reference

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Welcome

This section provides documentation for the Amazon CodeGuru Reviewer API operations. CodeGuru Reviewer is a service that uses program analysis and machine learning to detect potential defects that are difficult for developers to find and recommends fixes in your Java and Python code.

By proactively detecting and providing recommendations for addressing code defects and implementing best practices, CodeGuru Reviewer improves the overall quality and maintainability of your code base during the code review stage. For more information about CodeGuru Reviewer, see the [Amazon CodeGuru Reviewer User Guide](#).

To improve the security of your CodeGuru Reviewer API calls, you can establish a private connection between your VPC and CodeGuru Reviewer by creating an *interface VPC endpoint*. For more information, see [CodeGuru Reviewer and interface VPC endpoints \(AWS PrivateLink\)](#) in the *Amazon CodeGuru Reviewer User Guide*.

This document was last published on October 6, 2021.

Actions

The following actions are supported:

- [AssociateRepository](#) (p. 3)
- [CreateCodeReview](#) (p. 7)
- [DescribeCodeReview](#) (p. 11)
- [DescribeRecommendationFeedback](#) (p. 14)
- [DescribeRepositoryAssociation](#) (p. 17)
- [DisassociateRepository](#) (p. 20)
- [ListCodeReviews](#) (p. 23)
- [ListRecommendationFeedback](#) (p. 27)
- [ListRecommendations](#) (p. 30)
- [ListRepositoryAssociations](#) (p. 33)
- [ListTagsForResource](#) (p. 37)
- [PutRecommendationFeedback](#) (p. 39)
- [TagResource](#) (p. 42)
- [UntagResource](#) (p. 44)

AssociateRepository

Use to associate an AWS CodeCommit repository or a repository managed by AWS CodeStar Connections with Amazon CodeGuru Reviewer. When you associate a repository, CodeGuru Reviewer reviews source code changes in the repository's pull requests and provides automatic recommendations. You can view recommendations using the CodeGuru Reviewer console. For more information, see [Recommendations in Amazon CodeGuru Reviewer](#) in the *Amazon CodeGuru Reviewer User Guide*.

If you associate a CodeCommit or S3 repository, it must be in the same AWS Region and AWS account where its CodeGuru Reviewer code reviews are configured.

Bitbucket and GitHub Enterprise Server repositories are managed by AWS CodeStar Connections to connect to CodeGuru Reviewer. For more information, see [Associate a repository](#) in the *Amazon CodeGuru Reviewer User Guide*.

Note

You cannot use the CodeGuru Reviewer SDK or the AWS CLI to associate a GitHub repository with Amazon CodeGuru Reviewer. To associate a GitHub repository, use the console. For more information, see [Getting started with CodeGuru Reviewer](#) in the *CodeGuru Reviewer User Guide*.

Request Syntax

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

{
  "ClientRequestToken": "string",
  "KMSKeyDetails": {
    "EncryptionOption": "string",
    "KMSKeyId": "string"
  },
  "Repository": {
    "Bitbucket": {
      "ConnectionArn": "string",
      "Name": "string",
      "Owner": "string"
    },
    "CodeCommit": {
      "Name": "string"
    },
    "GitHubEnterpriseServer": {
      "ConnectionArn": "string",
      "Name": "string",
      "Owner": "string"
    },
    "S3Bucket": {
      "BucketName": "string",
      "Name": "string"
    }
  },
  "Tags": {
    "string" : "string"
  }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

[ClientRequestToken \(p. 3\)](#)

Amazon CodeGuru Reviewer uses this value to prevent the accidental creation of duplicate repository associations if there are failures and retries.

Type: String

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

Pattern: `^[\w-]+$`

Required: No

[KMSKeyDetails \(p. 3\)](#)

A `KMSKeyDetails` object that contains:

- The encryption option for this repository association. It is either owned by AWS Key Management Service (KMS) (`AWS_OWNED_CMK`) or customer managed (`CUSTOMER_MANAGED_CMK`).
- The ID of the AWS KMS key that is associated with this repository association.

Type: [KMSKeyDetails \(p. 59\)](#) object

Required: No

[Repository \(p. 3\)](#)

The repository to associate.

Type: [Repository \(p. 67\)](#) object

Required: Yes

[Tags \(p. 3\)](#)

An array of key-value pairs used to tag an associated repository. A tag is a custom attribute label with two parts:

- A *tag key* (for example, `CostCenter`, `Environment`, `Project`, or `Secret`). Tag keys are case sensitive.
- An optional field known as a *tag value* (for example, `111122223333`, `Production`, or a team name). Omitting the tag value is the same as using an empty string. Like tag keys, tag values are case sensitive.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Value Length Constraints: Maximum length of 256.

Required: No

Response Syntax

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

{
```

```

"RepositoryAssociation": {
  "AssociationArn": "string",
  "AssociationId": "string",
  "ConnectionArn": "string",
  "CreatedTimeStamp": number,
  "KMSKeyDetails": {
    "EncryptionOption": "string",
    "KMSKeyId": "string"
  },
  "LastUpdatedTimeStamp": number,
  "Name": "string",
  "Owner": "string",
  "ProviderType": "string",
  "S3RepositoryDetails": {
    "BucketName": "string",
    "CodeArtifacts": {
      "BuildArtifactsObjectKey": "string",
      "SourceCodeArtifactsObjectKey": "string"
    }
  },
  "State": "string",
  "StateReason": "string"
},
"Tags": {
  "string" : "string"
}
}

```

Response Elements

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

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

RepositoryAssociation (p. 4)

Information about the repository association.

Type: [RepositoryAssociation](#) (p. 69) object

Tags (p. 4)

An array of key-value pairs used to tag an associated repository. A tag is a custom attribute label with two parts:

- A *tag key* (for example, *CostCenter*, *Environment*, *Project*, or *Secret*). Tag keys are case sensitive.
- An optional field known as a *tag value* (for example, *111122223333*, *Production*, or a team name). Omitting the tag value is the same as using an empty string. Like tag keys, tag values are case sensitive.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Value Length Constraints: Maximum length of 256.

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

InternalServerErrorException

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the specified constraints.

HTTP Status Code: 400

See Also

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

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

CreateCodeReview

Use to create a code review with a [CodeReviewType](#) of `RepositoryAnalysis`. This type of code review analyzes all code under a specified branch in an associated repository. PullRequest code reviews are automatically triggered by a pull request.

Request Syntax

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

{
  "ClientRequestToken": "string",
  "Name": "string",
  "RepositoryAssociationArn": "string",
  "Type": {
    "AnalysisTypes": [ "string" ],
    "RepositoryAnalysis": {
      "RepositoryHead": {
        "BranchName": "string"
      },
      "SourceCodeType": {
        "BranchDiff": {
          "DestinationBranchName": "string",
          "SourceBranchName": "string"
        },
        "CommitDiff": {
          "DestinationCommit": "string",
          "MergeBaseCommit": "string",
          "SourceCommit": "string"
        },
        "RepositoryHead": {
          "BranchName": "string"
        },
        "RequestMetadata": {
          "EventInfo": {
            "Name": "string",
            "State": "string"
          },
          "Requester": "string",
          "RequestId": "string",
          "VendorName": "string"
        },
        "S3BucketRepository": {
          "Details": {
            "BucketName": "string",
            "CodeArtifacts": {
              "BuildArtifactsObjectKey": "string",
              "SourceCodeArtifactsObjectKey": "string"
            }
          },
          "Name": "string"
        }
      }
    }
  }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

[ClientRequestToken \(p. 7\)](#)

Amazon CodeGuru Reviewer uses this value to prevent the accidental creation of duplicate code reviews if there are failures and retries.

Type: String

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

Pattern: `^[\w-]+$`

Required: No

[Name \(p. 7\)](#)

The name of the code review. The name of each code review in your AWS account must be unique.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

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

Required: Yes

[RepositoryAssociationArn \(p. 7\)](#)

The Amazon Resource Name (ARN) of the [RepositoryAssociation](#) object. You can retrieve this ARN by calling [ListRepositoryAssociations](#).

A code review can only be created on an associated repository. This is the ARN of the associated repository.

Type: String

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

Pattern: `^arn:aws[^: \s]*:codeguru-reviewer:[^: \s]+:[\d]{12}:association:[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}$`

Required: Yes

[Type \(p. 7\)](#)

The type of code review to create. This is specified using a [CodeReviewType](#) object. You can create a code review only of type `RepositoryAnalysis`.

Type: [CodeReviewType \(p. 56\)](#) object

Required: Yes

Response Syntax

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

{
```

```

"CodeReview": {
  "AnalysisTypes": [ "string" ],
  "AssociationArn": "string",
  "CodeReviewArn": "string",
  "CreatedTimeStamp": number,
  "LastUpdatedTimeStamp": number,
  "Metrics": {
    "FindingsCount": number,
    "MeteredLinesOfCodeCount": number
  },
  "Name": "string",
  "Owner": "string",
  "ProviderType": "string",
  "PullRequestId": "string",
  "RepositoryName": "string",
  "SourceCodeType": {
    "BranchDiff": {
      "DestinationBranchName": "string",
      "SourceBranchName": "string"
    },
    "CommitDiff": {
      "DestinationCommit": "string",
      "MergeBaseCommit": "string",
      "SourceCommit": "string"
    },
    "RepositoryHead": {
      "BranchName": "string"
    },
    "RequestMetadata": {
      "EventInfo": {
        "Name": "string",
        "State": "string"
      },
      "Requester": "string",
      "RequestId": "string",
      "VendorName": "string"
    },
    "S3BucketRepository": {
      "Details": {
        "BucketName": "string",
        "CodeArtifacts": {
          "BuildArtifactsObjectKey": "string",
          "SourceCodeArtifactsObjectKey": "string"
        }
      },
      "Name": "string"
    }
  },
  "State": "string",
  "StateReason": "string",
  "Type": "string"
}

```

Response Elements

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

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

CodeReview (p. 8)

Information about a code review. A code review belongs to the associated repository that contains the reviewed code.

Type: [CodeReview](#) (p. 50) object

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

InternalServerErrorException

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

ResourceNotFoundException

The resource specified in the request was not found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the specified constraints.

HTTP Status Code: 400

See Also

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

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

DescribeCodeReview

Returns the metadata associated with the code review along with its status.

Request Syntax

```
GET /codereviews/CodeReviewArn HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

CodeReviewArn (p. 11)

The Amazon Resource Name (ARN) of the [CodeReview](#) object.

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

Pattern: `^arn:aws[^\s]*:codeguru-reviewer:[^\s]+:[\d]{12}:[\a-z-]+:[\w-]+$`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "CodeReview": {
    "AnalysisTypes": [ string ],
    "AssociationArn": string,
    "CodeReviewArn": string,
    "CreatedTimeStamp": number,
    "LastUpdatedTimeStamp": number,
    "Metrics": {
      "FindingsCount": number,
      "MeteredLinesOfCodeCount": number
    },
    "Name": string,
    "Owner": string,
    "ProviderType": string,
    "PullRequestId": string,
    "RepositoryName": string,
    "SourceCodeType": {
      "BranchDiff": {
        "DestinationBranchName": string,
        "SourceBranchName": string
      },
      "CommitDiff": {
        "DestinationCommit": string,
        "MergeBaseCommit": string,
        "SourceCommit": string
      }
    }
  }
}
```

```

    },
    "RepositoryHead": {
      "BranchName": "string"
    },
    "RequestMetadata": {
      "EventInfo": {
        "Name": "string",
        "State": "string"
      },
      "Requester": "string",
      "RequestId": "string",
      "VendorName": "string"
    },
    "S3BucketRepository": {
      "Details": {
        "BucketName": "string",
        "CodeArtifacts": {
          "BuildArtifactsObjectKey": "string",
          "SourceCodeArtifactsObjectKey": "string"
        }
      },
      "Name": "string"
    }
  },
  "State": "string",
  "StateReason": "string",
  "Type": "string"
}

```

Response Elements

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

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

CodeReview (p. 11)

Information about the code review.

Type: [CodeReview](#) (p. 50) object

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerError

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

ResourceNotFoundException

The resource specified in the request was not found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the specified constraints.

HTTP Status Code: 400

See Also

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

- [AWS Command Line Interface](#)
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- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeRecommendationFeedback

Describes the customer feedback for a CodeGuru Reviewer recommendation.

Request Syntax

```
GET /feedback/CodeReviewArn?RecommendationId=RecommendationId&UserId=UserId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

CodeReviewArn (p. 14)

The Amazon Resource Name (ARN) of the [CodeReview](#) object.

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

Pattern: `^arn:aws[^:\s]*:codeguru-reviewer:[^:\s]+:[\d]{12}:[a-z-]+:[\w-]+$`

Required: Yes

RecommendationId (p. 14)

The recommendation ID that can be used to track the provided recommendations and then to collect the feedback.

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

Required: Yes

UserId (p. 14)

Optional parameter to describe the feedback for a given user. If this is not supplied, it defaults to the user making the request.

The `UserId` is an IAM principal that can be specified as an AWS account ID or an Amazon Resource Name (ARN). For more information, see [Specifying a Principal](#) in the *AWS Identity and Access Management User Guide*.

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

Request Body

The request does not have a request body.

Response Syntax

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

{
  "RecommendationFeedback": {
    "CodeReviewArn": "string",
    "CreatedTimeStamp": number,
    "LastUpdatedTimeStamp": number,
```

```
    "Reactions": [ "string" ],  
    "RecommendationId": "string",  
    "UserId": "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.

RecommendationFeedback (p. 14)

The recommendation feedback given by the user.

Type: [RecommendationFeedback](#) (p. 62) object

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerError

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

ResourceNotFoundException

The resource specified in the request was not found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the specified constraints.

HTTP Status Code: 400

See Also

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

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)

- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeRepositoryAssociation

Returns a [RepositoryAssociation](#) object that contains information about the requested repository association.

Request Syntax

```
GET /associations/AssociationArn HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

[AssociationArn](#) (p. 17)

The Amazon Resource Name (ARN) of the [RepositoryAssociation](#) object. You can retrieve this ARN by calling [ListRepositoryAssociations](#).

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

Pattern: `^arn:aws[^:\s]*:codeguru-reviewer:[^:\s]+:[\d]{12}:association:[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}$`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "RepositoryAssociation": {
    "AssociationArn": "string",
    "AssociationId": "string",
    "ConnectionArn": "string",
    "CreatedTimeStamp": number,
    "KMSKeyDetails": {
      "EncryptionOption": "string",
      "KMSKeyId": "string"
    },
    "LastUpdatedTimeStamp": number,
    "Name": "string",
    "Owner": "string",
    "ProviderType": "string",
    "S3RepositoryDetails": {
      "BucketName": "string",
      "CodeArtifacts": {
        "BuildArtifactsObjectKey": "string",
        "SourceCodeArtifactsObjectKey": "string"
      }
    }
  }
}
```

```
    "State": "string",
    "StateReason": "string"
  },
  "Tags": {
    "string" : "string"
  }
}
```

Response Elements

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

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

RepositoryAssociation (p. 17)

Information about the repository association.

Type: [RepositoryAssociation](#) (p. 69) object

Tags (p. 17)

An array of key-value pairs used to tag an associated repository. A tag is a custom attribute label with two parts:

- A *tag key* (for example, *CostCenter*, *Environment*, *Project*, or *Secret*). Tag keys are case sensitive.
- An optional field known as a *tag value* (for example, *111122223333*, *Production*, or a team name). Omitting the tag value is the same as using an empty string. Like tag keys, tag values are case sensitive.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Value Length Constraints: Maximum length of 256.

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerError

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

NotFoundException

The resource specified in the request was not found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the specified constraints.

HTTP Status Code: 400

See Also

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

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

DisassociateRepository

Removes the association between Amazon CodeGuru Reviewer and a repository.

Request Syntax

```
DELETE /associations/AssociationArn HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

AssociationArn (p. 20)

The Amazon Resource Name (ARN) of the [RepositoryAssociation](#) object. You can retrieve this ARN by calling [ListRepositoryAssociations](#).

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

Pattern: `^arn:aws[^:\s]*:codeguru-reviewer:[^:\s]+:[\d]{12}:association:[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}$`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "RepositoryAssociation": {
    "AssociationArn": "string",
    "AssociationId": "string",
    "ConnectionArn": "string",
    "CreatedTimeStamp": number,
    "KMSKeyDetails": {
      "EncryptionOption": "string",
      "KMSKeyId": "string"
    },
    "LastUpdatedTimeStamp": number,
    "Name": "string",
    "Owner": "string",
    "ProviderType": "string",
    "S3RepositoryDetails": {
      "BucketName": "string",
      "CodeArtifacts": {
        "BuildArtifactsObjectKey": "string",
        "SourceCodeArtifactsObjectKey": "string"
      }
    },
    "State": "string",
```

```
    "StateReason": "string"
  },
  "Tags": {
    "string" : "string"
  }
}
```

Response Elements

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

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

RepositoryAssociation (p. 20)

Information about the disassociated repository.

Type: [RepositoryAssociation](#) (p. 69) object

Tags (p. 20)

An array of key-value pairs used to tag an associated repository. A tag is a custom attribute label with two parts:

- A *tag key* (for example, *CostCenter*, *Environment*, *Project*, or *Secret*). Tag keys are case sensitive.
- An optional field known as a *tag value* (for example, *111122223333*, *Production*, or a team name). Omitting the tag value is the same as using an empty string. Like tag keys, tag values are case sensitive.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Value Length Constraints: Maximum length of 256.

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

InternalServerErrorException

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

NotFoundException

The resource specified in the request was not found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the specified constraints.

HTTP Status Code: 400

See Also

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

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

ListCodeReviews

Lists all the code reviews that the customer has created in the past 90 days.

Request Syntax

```
GET /codereviews?
MaxResults=MaxResults&NextToken=NextToken&ProviderTypes=ProviderTypes&RepositoryNames=RepositoryNames&
HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

MaxResults (p. 23)

The maximum number of results that are returned per call. The default is 100.

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

NextToken (p. 23)

If nextToken is returned, there are more results available. The value of nextToken is a unique pagination token for each page. Make the call again using the returned token to retrieve the next page. Keep all other arguments unchanged.

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

ProviderTypes (p. 23)

List of provider types for filtering that needs to be applied before displaying the result. For example, providerTypes=[GitHub] lists code reviews from GitHub.

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

Valid Values: CodeCommit | GitHub | Bitbucket | GitHubEnterpriseServer | S3Bucket

RepositoryNames (p. 23)

List of repository names for filtering that needs to be applied before displaying the result.

Array Members: Minimum number of 1 item. Maximum number of 100 items.

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: ^\S[\w.-]*\$

States (p. 23)

List of states for filtering that needs to be applied before displaying the result. For example, states=[Pending] lists code reviews in the Pending state.

The valid code review states are:

- **Completed**: The code review is complete.
- **Pending**: The code review started and has not completed or failed.
- **Failed**: The code review failed.
- **Deleting**: The code review is being deleted.

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

Valid Values: Completed | Pending | Failed | Deleting

Type (p. 23)

The type of code reviews to list in the response.

Valid Values: PullRequest | RepositoryAnalysis

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "CodeReviewSummaries": [
    {
      "CodeReviewArn": "string",
      "CreatedTimeStamp": number,
      "LastUpdatedTimeStamp": number,
      "MetricsSummary": {
        "FindingsCount": number,
        "MeteredLinesOfCodeCount": number
      },
      "Name": "string",
      "Owner": "string",
      "ProviderType": "string",
      "PullRequestId": "string",
      "RepositoryName": "string",
      "SourceCodeType": {
        "BranchDiff": {
          "DestinationBranchName": "string",
          "SourceBranchName": "string"
        },
        "CommitDiff": {
          "DestinationCommit": "string",
          "MergeBaseCommit": "string",
          "SourceCommit": "string"
        },
        "RepositoryHead": {
          "BranchName": "string"
        }
      },
      "RequestMetadata": {
        "EventInfo": {
          "Name": "string",
          "State": "string"
        },
        "Requester": "string",
        "RequestId": "string",
        "VendorName": "string"
      },
      "S3BucketRepository": {
        "Details": {
          "BucketName": "string",
          "CodeArtifacts": {
```

```
        "BuildArtifactsObjectKey": "string",  
        "SourceCodeArtifactsObjectKey": "string"  
    },  
    },  
    "Name": "string"  
},  
},  
    "State": "string",  
    "Type": "string"  
},  
],  
    "NextToken": "string"  
}
```

Response Elements

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

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

CodeReviewSummaries (p. 24)

A list of code reviews that meet the criteria of the request.

Type: Array of [CodeReviewSummary](#) (p. 53) objects

NextToken (p. 24)

Pagination token.

Type: String

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

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerErrorException

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the specified constraints.

HTTP Status Code: 400

See Also

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

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

ListRecommendationFeedback

Returns a list of [RecommendationFeedbackSummary](#) objects that contain customer recommendation feedback for all CodeGuru Reviewer users.

Request Syntax

```
GET /feedback/CodeReviewArn/RecommendationFeedback?
MaxResults=MaxResults&NextToken=NextToken&RecommendationIds=RecommendationIds&UserIds=UserIds
HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

[CodeReviewArn \(p. 27\)](#)

The Amazon Resource Name (ARN) of the [CodeReview](#) object.

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

Pattern: `^arn:aws[^\s]*:codeguru-reviewer:[^\s]+:[\d]{12}:[\a-z-]+:[\w-]+&`

Required: Yes

[MaxResults \(p. 27\)](#)

The maximum number of results that are returned per call. The default is 100.

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

[NextToken \(p. 27\)](#)

If `nextToken` is returned, there are more results available. The value of `nextToken` is a unique pagination token for each page. Make the call again using the returned token to retrieve the next page. Keep all other arguments unchanged.

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

[RecommendationIds \(p. 27\)](#)

Used to query the recommendation feedback for a given recommendation.

Array Members: Minimum number of 1 item. Maximum number of 100 items.

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

[UserIds \(p. 27\)](#)

An AWS user's account ID or Amazon Resource Name (ARN). Use this ID to query the recommendation feedback for a code review from that user.

The `UserId` is an IAM principal that can be specified as an AWS account ID or an Amazon Resource Name (ARN). For more information, see [Specifying a Principal](#) in the *AWS Identity and Access Management User Guide*.

Array Members: Minimum number of 1 item. Maximum number of 100 items.

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

Request Body

The request does not have a request body.

Response Syntax

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

{
  "NextToken": "string",
  "RecommendationFeedbackSummaries": [
    {
      "Reactions": [ "string" ],
      "RecommendationId": "string",
      "UserId": "string"
    }
  ]
}
```

Response Elements

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

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

NextToken (p. 28)

If nextToken is returned, there are more results available. The value of nextToken is a unique pagination token for each page. Make the call again using the returned token to retrieve the next page. Keep all other arguments unchanged.

Type: String

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

RecommendationFeedbackSummaries (p. 28)

Recommendation feedback summaries corresponding to the code review ARN.

Type: Array of [RecommendationFeedbackSummary](#) (p. 64) objects

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerErrorException

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

ResourceNotFoundException

The resource specified in the request was not found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the specified constraints.

HTTP Status Code: 400

See Also

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

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

ListRecommendations

Returns the list of all recommendations for a completed code review.

Request Syntax

```
GET /codereviews/CodeReviewArn/Recommendations?MaxResults=MaxResults&NextToken=NextToken
HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

CodeReviewArn (p. 30)

The Amazon Resource Name (ARN) of the [CodeReview](#) object.

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

Pattern: `^arn:aws[^:\s]*:codeguru-reviewer:[^\s]+:[\d]{12}:[-a-z-]+:[\w-]+$`

Required: Yes

MaxResults (p. 30)

The maximum number of results that are returned per call. The default is 100.

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

NextToken (p. 30)

Pagination token.

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

Request Body

The request does not have a request body.

Response Syntax

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

{
  "NextToken": "string",
  "RecommendationSummaries": [
    {
      "Description": "string",
      "EndLine": number,
      "FilePath": "string",
      "RecommendationCategory": "string",
      "RecommendationId": "string",
      "RuleMetadata": {
        "LongDescription": "string",
        "RuleId": "string",
        "RuleName": "string",
```

```
    "RuleTags": [ "string" ],  
    "ShortDescription": "string"  
  },  
  "Severity": "string",  
  "StartLine": number  
}  
]  
}
```

Response Elements

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

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

NextToken (p. 30)

Pagination token.

Type: String

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

RecommendationSummaries (p. 30)

List of recommendations for the requested code review.

Type: Array of [RecommendationSummary](#) (p. 65) objects

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerError

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

ResourceNotFoundException

The resource specified in the request was not found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the specified constraints.

HTTP Status Code: 400

See Also

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

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

ListRepositoryAssociations

Returns a list of [RepositoryAssociationSummary](#) objects that contain summary information about a repository association. You can filter the returned list by [ProviderType](#), [Name](#), [State](#), and [Owner](#).

Request Syntax

```
GET /associations?
MaxResults=MaxResults&Name=Names&NextToken=NextToken&Owner=Owners&ProviderType=ProviderTypes&State=States
HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

MaxResults (p. 33)

The maximum number of repository association results returned by `ListRepositoryAssociations` in paginated output. When this parameter is used, `ListRepositoryAssociations` only returns `maxResults` results in a single page with a `nextToken` response element. The remaining results of the initial request can be seen by sending another `ListRepositoryAssociations` request with the returned `nextToken` value. This value can be between 1 and 100. If this parameter is not used, `ListRepositoryAssociations` returns up to 100 results and a `nextToken` value if applicable.

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

Names (p. 33)

List of repository names to use as a filter.

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

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: `^\S[\w.-]*$`

NextToken (p. 33)

The `nextToken` value returned from a previous paginated `ListRepositoryAssociations` request where `maxResults` was used and the results exceeded the value of that parameter. Pagination continues from the end of the previous results that returned the `nextToken` value.

Note

Treat this token as an opaque identifier that is only used to retrieve the next items in a list and not for other programmatic purposes.

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

Owners (p. 33)

List of owners to use as a filter. For AWS CodeCommit, it is the name of the CodeCommit account that was used to associate the repository. For other repository source providers, such as Bitbucket and GitHub Enterprise Server, this is name of the account that was used to associate the repository.

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

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: `^\S(.*\S)?$`

ProviderTypes (p. 33)

List of provider types to use as a filter.

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

Valid Values: `CodeCommit` | `GitHub` | `Bitbucket` | `GitHubEnterpriseServer` | `S3Bucket`

States (p. 33)

List of repository association states to use as a filter.

The valid repository association states are:

- **Associated:** The repository association is complete.
- **Associating:** CodeGuru Reviewer is:
 - Setting up pull request notifications. This is required for pull requests to trigger a CodeGuru Reviewer review.

Note

If your repository `ProviderType` is `GitHub`, `GitHub Enterprise Server`, or `Bitbucket`, CodeGuru Reviewer creates webhooks in your repository to trigger CodeGuru Reviewer reviews. If you delete these webhooks, reviews of code in your repository cannot be triggered.

- Setting up source code access. This is required for CodeGuru Reviewer to securely clone code in your repository.
- **Failed:** The repository failed to associate or disassociate.
- **Disassociating:** CodeGuru Reviewer is removing the repository's pull request notifications and source code access.
- **Disassociated:** CodeGuru Reviewer successfully disassociated the repository. You can create a new association with this repository if you want to review source code in it later. You can control access to code reviews created in an associated repository with tags after it has been disassociated. For more information, see [Using tags to control access to associated repositories](#) in the *Amazon CodeGuru Reviewer User Guide*.

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

Valid Values: `Associated` | `Associating` | `Failed` | `Disassociating` | `Disassociated`

Request Body

The request does not have a request body.

Response Syntax

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

{
  "NextToken": "string",
  "RepositoryAssociationSummaries": [
    {
      "AssociationArn": "string",
      "AssociationId": "string",
```



```
    "ConnectionArn": "string",  
    "LastUpdatedTimeStamp": number,  
    "Name": "string",  
    "Owner": "string",  
    "ProviderType": "string",  
    "State": "string"  
  }  
]  
}
```

Response Elements

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

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

NextToken (p. 34)

The nextToken value to include in a future ListRecommendations request. When the results of a ListRecommendations request exceed maxResults, this value can be used to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

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

RepositoryAssociationSummaries (p. 34)

A list of repository associations that meet the criteria of the request.

Type: Array of [RepositoryAssociationSummary](#) (p. 72) objects

Errors

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

InternalServerError

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the specified constraints.

HTTP Status Code: 400

See Also

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

- [AWS Command Line Interface](#)

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

ListTagsForResource

Returns the list of tags associated with an associated repository resource.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

resourceArn (p. 37)

The Amazon Resource Name (ARN) of the [RepositoryAssociation](#) object. You can retrieve this ARN by calling [ListRepositoryAssociations](#).

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

Pattern: `^arn:aws[^:\s]*:codeguru-reviewer:[^:\s]+:[\d]{12}:association:[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}$`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

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

Response Elements

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

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

Tags (p. 37)

An array of key-value pairs used to tag an associated repository. A tag is a custom attribute label with two parts:

- A *tag key* (for example, `CostCenter`, `Environment`, `Project`, or `Secret`). Tag keys are case sensitive.

- An optional field known as a *tag value* (for example, 111122223333, *Production*, or a team name). Omitting the tag value is the same as using an empty string. Like tag keys, tag values are case sensitive.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Value Length Constraints: Maximum length of 256.

Errors

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

InternalServerErrorException

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

ResourceNotFoundException

The resource specified in the request was not found.

HTTP Status Code: 404

ValidationException

The input fails to satisfy the specified constraints.

HTTP Status Code: 400

See Also

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

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

PutRecommendationFeedback

Stores customer feedback for a CodeGuru Reviewer recommendation. When this API is called again with different reactions the previous feedback is overwritten.

Request Syntax

```
PUT /feedback HTTP/1.1
Content-type: application/json

{
  "CodeReviewArn": "string",
  "Reactions": [ "string" ],
  "RecommendationId": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

CodeReviewArn (p. 39)

The Amazon Resource Name (ARN) of the [CodeReview](#) object.

Type: String

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

Pattern: `^arn:aws[^:\s]*:codeguru-reviewer:[^:\s]+:[\d]{12}:[\a-z-]+:[\w-]+$`

Required: Yes

Reactions (p. 39)

List for storing reactions. Reactions are utf-8 text code for emojis. If you send an empty list it clears all your feedback.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 1 item.

Valid Values: `ThumbsUp` | `ThumbsDown`

Required: Yes

RecommendationId (p. 39)

The recommendation ID that can be used to track the provided recommendations and then to collect the feedback.

Type: String

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

Required: Yes

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerError

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

ResourceNotFoundException

The resource specified in the request was not found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the specified constraints.

HTTP Status Code: 400

See Also

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

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

TagResource

Adds one or more tags to an associated repository.

Request Syntax

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

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

URI Request Parameters

The request uses the following URI parameters.

resourceArn (p. 42)

The Amazon Resource Name (ARN) of the [RepositoryAssociation](#) object. You can retrieve this ARN by calling [ListRepositoryAssociations](#).

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

Pattern: `^arn:aws[^\s]*:codeguru-reviewer:[^\s]+:[\d]{12}:association:[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}$`

Required: Yes

Request Body

The request accepts the following data in JSON format.

Tags (p. 42)

An array of key-value pairs used to tag an associated repository. A tag is a custom attribute label with two parts:

- A *tag key* (for example, `CostCenter`, `Environment`, `Project`, or `Secret`). Tag keys are case sensitive.
- An optional field known as a *tag value* (for example, `111122223333`, `Production`, or a team name). Omitting the tag value is the same as using an empty string. Like tag keys, tag values are case sensitive.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Value Length Constraints: Maximum length of 256.

Required: Yes

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

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

InternalServerErrorException

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

ResourceNotFoundException

The resource specified in the request was not found.

HTTP Status Code: 404

ValidationException

The input fails to satisfy the specified constraints.

HTTP Status Code: 400

See Also

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

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

UntagResource

Removes a tag from an associated repository.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

resourceArn (p. 44)

The Amazon Resource Name (ARN) of the [RepositoryAssociation](#) object. You can retrieve this ARN by calling [ListRepositoryAssociations](#).

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

Pattern: `^arn:aws[^:\s]*:codeguru-reviewer:[^:\s]+:[\d]{12}:association:[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}$`

Required: Yes

TagKeys (p. 44)

A list of the keys for each tag you want to remove from an associated repository.

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

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

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

InternalServerErrorException

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

ResourceNotFoundException

The resource specified in the request was not found.

HTTP Status Code: 404

ValidationException

The input fails to satisfy the specified constraints.

HTTP Status Code: 400

See Also

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

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

Data Types

The Amazon CodeGuru Reviewer 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:

- [BranchDiffSourceCodeType](#) (p. 47)
- [CodeArtifacts](#) (p. 48)
- [CodeCommitRepository](#) (p. 49)
- [CodeReview](#) (p. 50)
- [CodeReviewSummary](#) (p. 53)
- [CodeReviewType](#) (p. 56)
- [CommitDiffSourceCodeType](#) (p. 57)
- [EventInfo](#) (p. 58)
- [KMSKeyDetails](#) (p. 59)
- [Metrics](#) (p. 60)
- [MetricsSummary](#) (p. 61)
- [RecommendationFeedback](#) (p. 62)
- [RecommendationFeedbackSummary](#) (p. 64)
- [RecommendationSummary](#) (p. 65)
- [Repository](#) (p. 67)
- [RepositoryAnalysis](#) (p. 68)
- [RepositoryAssociation](#) (p. 69)
- [RepositoryAssociationSummary](#) (p. 72)
- [RepositoryHeadSourceCodeType](#) (p. 75)
- [RequestMetadata](#) (p. 76)
- [RuleMetadata](#) (p. 78)
- [S3BucketRepository](#) (p. 80)
- [S3Repository](#) (p. 81)
- [S3RepositoryDetails](#) (p. 82)
- [SourceCodeType](#) (p. 83)
- [ThirdPartySourceRepository](#) (p. 85)

BranchDiffSourceCodeType

A type of [SourceCodeType](#) that specifies a code diff between a source and destination branch in an associated repository.

Contents

DestinationBranchName

The destination branch for a diff in an associated repository.

Type: String

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

Required: Yes

SourceBranchName

The source branch for a diff in an associated repository.

Type: String

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

Required: Yes

See Also

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

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

CodeArtifacts

Code artifacts are source code artifacts and build artifacts used in a repository analysis or a pull request review.

- Source code artifacts are source code files in a Git repository that are compressed into a .zip file.
- Build artifacts are .jar or .class files that are compressed in a .zip file.

Contents

BuildArtifactsObjectKey

The S3 object key for a build artifacts .zip file that contains .jar or .class files. This is required for a code review with security analysis. For more information, see [Create code reviews with security analysis](#) in the *Amazon CodeGuru Reviewer User Guide*.

Type: String

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

Pattern: `^\S(.*\S)?$`

Required: No

SourceCodeArtifactsObjectKey

The S3 object key for a source code .zip file. This is required for all code reviews.

Type: String

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

Pattern: `^\S(.*\S)?$`

Required: Yes

See Also

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

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

CodeCommitRepository

Information about an AWS CodeCommit repository. The CodeCommit repository must be in the same AWS Region and AWS account where its CodeGuru Reviewer code reviews are configured.

Contents

Name

The name of the AWS CodeCommit repository. For more information, see [repositoryName](#) in the *AWS CodeCommit API Reference*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: `^\S[\w.-]*$`

Required: Yes

See Also

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

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

CodeReview

Information about a code review. A code review belongs to the associated repository that contains the reviewed code.

Contents

AnalysisTypes

They types of analysis performed during a repository analysis or a pull request review. You can specify either `Security`, `CodeQuality`, or both.

Type: Array of strings

Valid Values: `Security` | `CodeQuality`

Required: No

AssociationArn

The Amazon Resource Name (ARN) of the [RepositoryAssociation](#) that contains the reviewed source code. You can retrieve associated repository ARNs by calling [ListRepositoryAssociations](#).

Type: String

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

Pattern: `^arn:aws[^:\\s]*:codeguru-reviewer:[^:\\s]+:[\\d]{12}:association:[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}$`

Required: No

CodeReviewArn

The Amazon Resource Name (ARN) of the [CodeReview](#) object.

Type: String

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

Pattern: `^arn:aws[^:\\s]*:codeguru-reviewer:[^:\\s]+:[\\d]{12}:[-a-z-]+:[\\w-]+$`

Required: No

CreatedTimeStamp

The time, in milliseconds since the epoch, when the code review was created.

Type: Timestamp

Required: No

LastUpdatedTimeStamp

The time, in milliseconds since the epoch, when the code review was last updated.

Type: Timestamp

Required: No

Metrics

The statistics from the code review.

Type: [Metrics](#) (p. 60) object

Required: No

Name

The name of the code review.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: `^\S[\w.-]*$`

Required: No

Owner

The owner of the repository. For an AWS CodeCommit repository, this is the AWS account ID of the account that owns the repository. For a GitHub, GitHub Enterprise Server, or Bitbucket repository, this is the username for the account that owns the repository. For an S3 repository, it can be the username or AWS account ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: `^\S(.*\S)?$`

Required: No

ProviderType

The type of repository that contains the reviewed code (for example, GitHub or Bitbucket).

Type: String

Valid Values: `CodeCommit` | `GitHub` | `Bitbucket` | `GitHubEnterpriseServer` | `S3Bucket`

Required: No

PullRequestId

The pull request ID for the code review.

Type: String

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

Required: No

RepositoryName

The name of the repository.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: `^\S[\w.-]*$`

Required: No

SourceCodeType

The type of the source code for the code review.

Type: [SourceCodeType](#) (p. 83) object

Required: No

State

The valid code review states are:

- `Completed`: The code review is complete.
- `Pending`: The code review started and has not completed or failed.
- `Failed`: The code review failed.
- `Deleting`: The code review is being deleted.

Type: String

Valid Values: `Completed` | `Pending` | `Failed` | `Deleting`

Required: No

StateReason

The reason for the state of the code review.

Type: String

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

Required: No

Type

The type of code review.

Type: String

Valid Values: `PullRequest` | `RepositoryAnalysis`

Required: No

See Also

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

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

CodeReviewSummary

Information about the summary of the code review.

Contents

CodeReviewArn

The Amazon Resource Name (ARN) of the [CodeReview](#) object.

Type: String

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

Pattern: `^arn:aws[^:\s]*:codeguru-reviewer:[^:\s]+:[\d]{12}:[-a-z-]+:[\w-]+$`

Required: No

CreatedTimeStamp

The time, in milliseconds since the epoch, when the code review was created.

Type: Timestamp

Required: No

LastUpdatedTimeStamp

The time, in milliseconds since the epoch, when the code review was last updated.

Type: Timestamp

Required: No

MetricsSummary

The statistics from the code review.

Type: [MetricsSummary](#) (p. 61) object

Required: No

Name

The name of the code review.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: `^\S[\w.-]*$`

Required: No

Owner

The owner of the repository. For an AWS CodeCommit repository, this is the AWS account ID of the account that owns the repository. For a GitHub, GitHub Enterprise Server, or Bitbucket repository, this is the username for the account that owns the repository. For an S3 repository, it can be the username or AWS account ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: `^\S(.*\S)?$`

Required: No

ProviderType

The provider type of the repository association.

Type: String

Valid Values: `CodeCommit` | `GitHub` | `Bitbucket` | `GitHubEnterpriseServer` | `S3Bucket`

Required: No

PullRequestId

The pull request ID for the code review.

Type: String

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

Required: No

RepositoryName

The name of the repository.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: `^\S[\\w.-]*$`

Required: No

SourceCodeType

Specifies the source code that is analyzed in a code review.

Type: [SourceCodeType](#) (p. 83) object

Required: No

State

The state of the code review.

The valid code review states are:

- `Completed`: The code review is complete.
- `Pending`: The code review started and has not completed or failed.
- `Failed`: The code review failed.
- `Deleting`: The code review is being deleted.

Type: String

Valid Values: `Completed` | `Pending` | `Failed` | `Deleting`

Required: No

Type

The type of the code review.

Type: String

Valid Values: `PullRequest` | `RepositoryAnalysis`

Required: No

See Also

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

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

CodeReviewType

The type of a code review. There are two code review types:

- **PullRequest** - A code review that is automatically triggered by a pull request on an associated repository.
- **RepositoryAnalysis** - A code review that analyzes all code under a specified branch in an associated repository. The associated repository is specified using its ARN in [CreateCodeReview](#).

Contents

AnalysisTypes

They types of analysis performed during a repository analysis or a pull request review. You can specify either `Security`, `CodeQuality`, or both.

Type: Array of strings

Valid Values: `Security` | `CodeQuality`

Required: No

RepositoryAnalysis

A code review that analyzes all code under a specified branch in an associated repository. The associated repository is specified using its ARN in [CreateCodeReview](#).

Type: [RepositoryAnalysis](#) (p. 68) object

Required: Yes

See Also

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

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

CommitDiffSourceCodeType

A type of [SourceCodeType](#) that specifies the commit diff for a pull request on an associated repository. The `SourceCommit` and `DestinationCommit` fields are required to do a pull request code review.

Contents

DestinationCommit

The SHA of the destination commit used to generate a commit diff. This field is required for a pull request code review.

Type: String

Length Constraints: Minimum length of 6. Maximum length of 64.

Required: No

MergeBaseCommit

The SHA of the merge base of a commit.

Type: String

Length Constraints: Minimum length of 6. Maximum length of 64.

Required: No

SourceCommit

The SHA of the source commit used to generate a commit diff. This field is required for a pull request code review.

Type: String

Length Constraints: Minimum length of 6. Maximum length of 64.

Required: No

See Also

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

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

EventInfo

Information about an event. The event might be a push, pull request, scheduled request, or another type of event.

Contents

Name

The name of the event. The possible names are `pull_request`, `workflow_dispatch`, `schedule`, and `push`

Type: String

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

Pattern: `^[\-A-Z_a-z]+$`

Required: No

State

The state of an event. The state might be open, closed, or another state.

Type: String

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

Pattern: `^[\-A-Z_a-z]+$`

Required: No

See Also

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

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

KMSKeyDetails

An object that contains:

- The encryption option for a repository association. It is either owned by AWS Key Management Service (KMS) (`AWS_OWNED_CMK`) or customer managed (`CUSTOMER_MANAGED_CMK`).
- The ID of the AWS KMS key that is associated with a repository association.

Contents

EncryptionOption

The encryption option for a repository association. It is either owned by AWS Key Management Service (KMS) (`AWS_OWNED_CMK`) or customer managed (`CUSTOMER_MANAGED_CMK`).

Type: String

Valid Values: `AWS_OWNED_CMK` | `CUSTOMER_MANAGED_CMK`

Required: No

KMSKeyId

The ID of the AWS KMS key that is associated with a repository association.

Type: String

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

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

Required: No

See Also

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

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

Metrics

Information about the statistics from the code review.

Contents

FindingsCount

Total number of recommendations found in the code review.

Type: Long

Required: No

MeteredLinesOfCodeCount

`MeteredLinesOfCode` is the number of lines of code in the repository where the code review happened. This does not include non-code lines such as comments and blank lines.

Type: Long

Required: No

See Also

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

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

MetricsSummary

Information about metrics summaries.

Contents

FindingsCount

Total number of recommendations found in the code review.

Type: Long

Required: No

MeteredLinesOfCodeCount

Lines of code metered in the code review. For the initial code review pull request and all subsequent revisions, this includes all lines of code in the files added to the pull request. In subsequent revisions, for files that already existed in the pull request, this includes only the changed lines of code. In both cases, this does not include non-code lines such as comments and import statements. For example, if you submit a pull request containing 5 files, each with 500 lines of code, and in a subsequent revision you added a new file with 200 lines of code, and also modified a total of 25 lines across the initial 5 files, `MeteredLinesOfCodeCount` includes the first 5 files ($5 * 500 = 2,500$ lines), the new file (200 lines) and the 25 changed lines of code for a total of 2,725 lines of code.

Type: Long

Required: No

See Also

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

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

RecommendationFeedback

Information about the recommendation feedback.

Contents

CodeReviewArn

The Amazon Resource Name (ARN) of the [CodeReview](#) object.

Type: String

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

Pattern: `^arn:aws[^\s]*:codeguru-reviewer:[^\s]+:[\d]{12}:[-a-z-]+:[\w-]+$`

Required: No

CreatedTimeStamp

The time at which the feedback was created.

Type: Timestamp

Required: No

LastUpdatedTimeStamp

The time at which the feedback was last updated.

Type: Timestamp

Required: No

Reactions

List for storing reactions. Reactions are utf-8 text code for emojis. You can send an empty list to clear off all your feedback.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 1 item.

Valid Values: `ThumbsUp` | `ThumbsDown`

Required: No

RecommendationId

The recommendation ID that can be used to track the provided recommendations. Later on it can be used to collect the feedback.

Type: String

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

Required: No

UserId

The ID of the user that made the API call.

The `UserId` is an IAM principal that can be specified as an AWS account ID or an Amazon Resource Name (ARN). For more information, see [Specifying a Principal](#) in the *AWS Identity and Access Management User Guide*.

Type: String

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

Required: No

See Also

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

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

RecommendationFeedbackSummary

Information about recommendation feedback summaries.

Contents

Reactions

List for storing reactions. Reactions are utf-8 text code for emojis.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 1 item.

Valid Values: `ThumbsUp` | `ThumbsDown`

Required: No

RecommendationId

The recommendation ID that can be used to track the provided recommendations. Later on it can be used to collect the feedback.

Type: String

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

Required: No

UserId

The ID of the user that gave the feedback.

The `UserId` is an IAM principal that can be specified as an AWS account ID or an Amazon Resource Name (ARN). For more information, see [Specifying a Principal](#) in the *AWS Identity and Access Management User Guide*.

Type: String

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

Required: No

See Also

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

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

RecommendationSummary

Information about recommendations.

Contents

Description

A description of the recommendation generated by CodeGuru Reviewer for the lines of code between the start line and the end line.

Type: String

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

Required: No

EndLine

Last line where the recommendation is applicable in the source commit or source branch. For a single line comment the start line and end line values are the same.

Type: Integer

Required: No

FilePath

Name of the file on which a recommendation is provided.

Type: String

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

Required: No

RecommendationCategory

The type of a recommendation.

Type: String

Valid Values: `AWSBestPractices` | `AWSCloudFormationIssues` | `DuplicateCode` | `CodeMaintenanceIssues` | `ConcurrencyIssues` | `InputValidations` | `PythonBestPractices` | `JavaBestPractices` | `ResourceLeaks` | `SecurityIssues` | `CodeInconsistencies`

Required: No

RecommendationId

The recommendation ID that can be used to track the provided recommendations. Later on it can be used to collect the feedback.

Type: String

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

Required: No

RuleMetadata

Metadata about a rule. Rule metadata includes an ID, a name, a list of tags, and a short and long description. CodeGuru Reviewer uses rules to analyze code. A rule's recommendation is included in analysis results if code is detected that violates the rule.

Type: [RuleMetadata](#) (p. 78) object

Required: No

Severity

The severity of the issue in the code that generated this recommendation.

Type: String

Valid Values: Info | Low | Medium | High | Critical

Required: No

StartLine

Start line from where the recommendation is applicable in the source commit or source branch.

Type: Integer

Required: No

See Also

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

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

Repository

Information about an associated AWS CodeCommit repository or an associated repository that is managed by AWS CodeStar Connections (for example, Bitbucket). This `Repository` object is not used if your source code is in an associated GitHub repository.

Contents

Bitbucket

Information about a Bitbucket repository.

Type: [ThirdPartySourceRepository](#) (p. 85) object

Required: No

CodeCommit

Information about an AWS CodeCommit repository.

Type: [CodeCommitRepository](#) (p. 49) object

Required: No

GitHubEnterpriseServer

Information about a GitHub Enterprise Server repository.

Type: [ThirdPartySourceRepository](#) (p. 85) object

Required: No

S3Bucket

Information about a repository in an S3 bucket.

Type: [S3Repository](#) (p. 81) object

Required: No

See Also

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

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

RepositoryAnalysis

A code review type that analyzes all code under a specified branch in an associated repository. The associated repository is specified using its ARN when you call [CreateCodeReview](#).

Contents

RepositoryHead

A [SourceCodeType](#) that specifies the tip of a branch in an associated repository.

Type: [RepositoryHeadSourceCodeType](#) (p. 75) object

Required: No

SourceCodeType

Specifies the source code that is analyzed in a code review.

Type: [SourceCodeType](#) (p. 83) object

Required: No

See Also

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

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

LastUpdatedTimeStamp

The time, in milliseconds since the epoch, when the repository association was last updated.

Type: Timestamp

Required: No

Name

The name of the repository.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: `^\S[\w.-]*$`

Required: No

Owner

The owner of the repository. For an AWS CodeCommit repository, this is the AWS account ID of the account that owns the repository. For a GitHub, GitHub Enterprise Server, or Bitbucket repository, this is the username for the account that owns the repository. For an S3 repository, it can be the username or AWS account ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: `^\S(.*\S)?$`

Required: No

ProviderType

The provider type of the repository association.

Type: String

Valid Values: `CodeCommit` | `GitHub` | `Bitbucket` | `GitHubEnterpriseServer` | `S3Bucket`

Required: No

S3RepositoryDetails

Specifies the name of an S3 bucket and a `CodeArtifacts` object that contains the S3 object keys for a source code .zip file and for a build artifacts .zip file that contains .jar or .class files.

Type: [S3RepositoryDetails](#) (p. 82) object

Required: No

State

The state of the repository association.

The valid repository association states are:

- **Associated:** The repository association is complete.
- **Associating:** CodeGuru Reviewer is:
 - Setting up pull request notifications. This is required for pull requests to trigger a CodeGuru Reviewer review.

Note

If your repository `ProviderType` is `GitHub`, `GitHub Enterprise Server`, or `Bitbucket`, CodeGuru Reviewer creates webhooks in your repository to trigger CodeGuru Reviewer reviews. If you delete these webhooks, reviews of code in your repository cannot be triggered.

- Setting up source code access. This is required for CodeGuru Reviewer to securely clone code in your repository.
- **Failed:** The repository failed to associate or disassociate.
- **Disassociating:** CodeGuru Reviewer is removing the repository's pull request notifications and source code access.
- **Disassociated:** CodeGuru Reviewer successfully disassociated the repository. You can create a new association with this repository if you want to review source code in it later. You can control access to code reviews created in an associated repository with tags after it has been disassociated. For more information, see [Using tags to control access to associated repositories](#) in the *Amazon CodeGuru Reviewer User Guide*.

Type: String

Valid Values: `Associated` | `Associating` | `Failed` | `Disassociating` | `Disassociated`

Required: No

StateReason

A description of why the repository association is in the current state.

Type: String

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

Required: No

See Also

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

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

RepositoryAssociationSummary

Summary information about a repository association. The [ListRepositoryAssociations](#) operation returns a list of `RepositoryAssociationSummary` objects.

Contents

AssociationArn

The Amazon Resource Name (ARN) of the [RepositoryAssociation](#) object. You can retrieve this ARN by calling [ListRepositoryAssociations](#).

Type: String

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

Pattern: `^arn:aws[^:\s]*:codeguru-reviewer:[^:\s]+:[\d]{12}:[a-z-]+:[\w-]+$`

Required: No

AssociationId

The repository association ID.

Type: String

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

Required: No

ConnectionArn

The Amazon Resource Name (ARN) of an AWS CodeStar Connections connection. Its format is `arn:aws:codestar-connections:region-id:aws-account_id:connection/connection-id`. For more information, see [Connection](#) in the *AWS CodeStar Connections API Reference*.

Type: String

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

Pattern: `arn:aws(-[\w]+)*:.\+:.\+: [0-9]{12}:.+`

Required: No

LastUpdatedTimeStamp

The time, in milliseconds since the epoch, since the repository association was last updated.

Type: Timestamp

Required: No

Name

The name of the repository association.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: `^\S[\w.-]*$`

Required: No

Owner

The owner of the repository. For an AWS CodeCommit repository, this is the AWS account ID of the account that owns the repository. For a GitHub, GitHub Enterprise Server, or Bitbucket repository, this is the username for the account that owns the repository. For an S3 repository, it can be the username or AWS account ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: `^\S(.*\S)?$`

Required: No

ProviderType

The provider type of the repository association.

Type: String

Valid Values: `CodeCommit` | `GitHub` | `Bitbucket` | `GitHubEnterpriseServer` | `S3Bucket`

Required: No

State

The state of the repository association.

The valid repository association states are:

- **Associated:** The repository association is complete.
- **Associating:** CodeGuru Reviewer is:
 - Setting up pull request notifications. This is required for pull requests to trigger a CodeGuru Reviewer review.
- **Note**
If your repository `ProviderType` is `GitHub`, `GitHub Enterprise Server`, or `Bitbucket`, CodeGuru Reviewer creates webhooks in your repository to trigger CodeGuru Reviewer reviews. If you delete these webhooks, reviews of code in your repository cannot be triggered.
- Setting up source code access. This is required for CodeGuru Reviewer to securely clone code in your repository.
- **Failed:** The repository failed to associate or disassociate.
- **Disassociating:** CodeGuru Reviewer is removing the repository's pull request notifications and source code access.
- **Disassociated:** CodeGuru Reviewer successfully disassociated the repository. You can create a new association with this repository if you want to review source code in it later. You can control access to code reviews created in an associated repository with tags after it has been disassociated. For more information, see [Using tags to control access to associated repositories](#) in the *Amazon CodeGuru Reviewer User Guide*.

Type: String

Valid Values: `Associated` | `Associating` | `Failed` | `Disassociating` | `Disassociated`

Required: No

See Also

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

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

RepositoryHeadSourceCodeType

A [SourceCodeType](#) that specifies the tip of a branch in an associated repository.

Contents

BranchName

The name of the branch in an associated repository. The `RepositoryHeadSourceCodeType` specifies the tip of this branch.

Type: String

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

Required: Yes

See Also

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

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

RequestMetadata

Metadata that is associated with a code review. This applies to both pull request and repository analysis code reviews.

Contents

EventInfo

Information about the event associated with a code review.

Type: [EventInfo](#) (p. 58) object

Required: No

Requester

An identifier, such as a name or account ID, that is associated with the requester. The `Requester` is used to capture the `author/actor` name of the event request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: `^\S(.*\S)?$`

Required: No

RequestId

The ID of the request. This is required for a pull request code review.

Type: String

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

Required: No

VendorName

The name of the repository vendor used to upload code to an S3 bucket for a CI/CD code review. For example, if code and artifacts are uploaded to an S3 bucket for a CI/CD code review by GitHub scripts from a GitHub repository, then the repository association's `ProviderType` is `S3Bucket` and the CI/CD repository vendor name is GitHub. For more information, see the definition for `ProviderType` in [RepositoryAssociation](#).

Type: String

Valid Values: `GitHub` | `GitLab` | `NativeS3`

Required: No

See Also

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

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)

- [AWS SDK for Ruby V3](#)

RuleMetadata

Metadata about a rule. Rule metadata includes an ID, a name, a list of tags, and a short and long description. CodeGuru Reviewer uses rules to analyze code. A rule's recommendation is included in analysis results if code is detected that violates the rule.

Contents

LongDescription

A long description of the rule.

Type: String

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

Pattern: `^\S(.*\S)?$`

Required: No

RuleId

The ID of the rule.

Type: String

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

Pattern: `^\S+\/[a-zA-Z0-9-]+@v\d+\. \d+$`

Required: No

RuleName

The name of the rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: `^\S(.*\S)?$`

Required: No

RuleTags

Tags that are associated with the rule.

Type: Array of strings

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

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

Pattern: `^\S(.*\S)?$`

Required: No

ShortDescription

A short description of the rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 200.

Pattern: `^\S(.*\S)?$`

Required: No

See Also

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

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

S3BucketRepository

Information about an associated repository in an S3 bucket. The associated repository contains a source code .zip file and a build artifacts .zip file that contains .jar or .class files.

Contents

Details

An `S3RepositoryDetails` object that specifies the name of an S3 bucket and a `CodeArtifacts` object. The `CodeArtifacts` object includes the S3 object keys for a source code .zip file and for a build artifacts .zip file.

Type: [S3RepositoryDetails](#) (p. 82) object

Required: No

Name

The name of the repository when the `ProviderType` is `S3Bucket`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: `^\S[\w.-]*$`

Required: Yes

See Also

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

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

S3Repository

Information about a repository in an S3 bucket.

Contents

BucketName

The name of the S3 bucket used for associating a new S3 repository. It must begin with `codeguru-reviewer-`.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 63.

Pattern: `^\S(.*\S)?$`

Required: Yes

Name

The name of the repository in the S3 bucket.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: `^\S[\w.-]*$`

Required: Yes

See Also

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

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

S3RepositoryDetails

Specifies the name of an S3 bucket and a `CodeArtifacts` object that contains the S3 object keys for a source code .zip file and for a build artifacts .zip file that contains .jar or .class files.

Contents

BucketName

The name of the S3 bucket used for associating a new S3 repository. It must begin with `codeguru-reviewer-`.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 63.

Pattern: `^\S(.*\S)?$`

Required: No

CodeArtifacts

A `CodeArtifacts` object. The `CodeArtifacts` object includes the S3 object key for a source code .zip file and for a build artifacts .zip file that contains .jar or .class files.

Type: [CodeArtifacts](#) (p. 48) object

Required: No

See Also

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

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

SourceCodeType

Specifies the source code that is analyzed in a code review.

Contents

BranchDiff

A type of [SourceCodeType](#) that specifies a source branch name and a destination branch name in an associated repository.

Type: [BranchDiffSourceCodeType](#) (p. 47) object

Required: No

CommitDiff

A [SourceCodeType](#) that specifies a commit diff created by a pull request on an associated repository.

Type: [CommitDiffSourceCodeType](#) (p. 57) object

Required: No

RepositoryHead

A [SourceCodeType](#) that specifies the tip of a branch in an associated repository.

Type: [RepositoryHeadSourceCodeType](#) (p. 75) object

Required: No

RequestMetadata

Metadata that is associated with a code review. This applies to any type of code review supported by CodeGuru Reviewer. The `RequestMetadata` field captures any event metadata. For example, it might capture metadata associated with an event trigger, such as a push or a pull request.

Type: [RequestMetadata](#) (p. 76) object

Required: No

S3BucketRepository

Information about an associated repository in an S3 bucket that includes its name and an `S3RepositoryDetails` object. The `S3RepositoryDetails` object includes the name of an S3 bucket, an S3 key for a source code .zip file, and an S3 key for a build artifacts .zip file. `S3BucketRepository` is required in [SourceCodeType](#) for `S3BucketRepository` based code reviews.

Type: [S3BucketRepository](#) (p. 80) object

Required: No

See Also

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

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)

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

ThirdPartySourceRepository

Information about a third-party source repository connected to CodeGuru Reviewer.

Contents

ConnectionArn

The Amazon Resource Name (ARN) of an AWS CodeStar Connections connection. Its format is `arn:aws:codestar-connections:region-id:aws-account_id:connection/connection-id`. For more information, see [Connection](#) in the *AWS CodeStar Connections API Reference*.

Type: String

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

Pattern: `arn:aws(-[\w]+)*:.:+:.[0-9]{12}:.+`

Required: Yes

Name

The name of the third party source repository.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: `^\S[\w.-]*$`

Required: Yes

Owner

The owner of the repository. For a GitHub, GitHub Enterprise, or Bitbucket repository, this is the username for the account that owns the repository. For an S3 repository, this can be the username or AWS account ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: `^\S(.*\S)?$`

Required: Yes

See Also

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

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

Common Parameters

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

Action

The action to be performed.

Type: string

Required: Yes

Version

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

Type: string

Required: Yes

X-Amz-Algorithm

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

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

Type: string

Valid Values: `AWS4-HMAC-SHA256`

Required: Conditional

X-Amz-Credential

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

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

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

Type: string

Required: Conditional

X-Amz-Date

The date that is used to create the signature. The format must be ISO 8601 basic format (YYYYMMDD'THHMMSS'Z'). For example, the following date time is a valid X-Amz-Date value: `20120325T120000Z`.

Condition: X-Amz-Date is optional for all requests; it can be used to override the date used for signing requests. If the Date header is specified in the ISO 8601 basic format, X-Amz-Date is

not required. When X-Amz-Date is used, it always overrides the value of the Date header. For more information, see [Handling Dates in Signature Version 4](#) in the *Amazon Web Services General Reference*.

Type: string

Required: Conditional

X-Amz-Security-Token

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

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

Type: string

Required: Conditional

X-Amz-Signature

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

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

Type: string

Required: Conditional

X-Amz-SignedHeaders

Specifies all the HTTP headers that were included as part of the canonical request. For more information about specifying signed headers, see [Task 1: Create a Canonical Request For Signature Version 4](#) in the *Amazon Web Services General Reference*.

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

Type: string

Required: Conditional

Common Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 400

IncompleteSignature

The request signature does not conform to AWS standards.

HTTP Status Code: 400

InternalFailure

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

HTTP Status Code: 500

InvalidAction

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

HTTP Status Code: 400

InvalidClientTokenId

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

HTTP Status Code: 403

InvalidParameterCombination

Parameters that must not be used together were used together.

HTTP Status Code: 400

InvalidParameterValue

An invalid or out-of-range value was supplied for the input parameter.

HTTP Status Code: 400

InvalidQueryParameter

The AWS query string is malformed or does not adhere to AWS standards.

HTTP Status Code: 400

MalformedQueryString

The query string contains a syntax error.

HTTP Status Code: 404

MissingAction

The request is missing an action or a required parameter.

HTTP Status Code: 400

MissingAuthenticationToken

The request must contain either a valid (registered) AWS access key ID or X.509 certificate.

HTTP Status Code: 403

MissingParameter

A required parameter for the specified action is not supplied.

HTTP Status Code: 400

NotAuthorized

You do not have permission to perform this action.

HTTP Status Code: 400

OptInRequired

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

HTTP Status Code: 403

RequestExpired

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

HTTP Status Code: 400

ServiceUnavailable

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

HTTP Status Code: 503

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 400

ValidationError

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

HTTP Status Code: 400