Amazon CloudWatch Application
Insights for .NET and SQL Server

Welcome

API Version 2018-11-25
Amazon CloudWatch Application Insights for .NET and SQL Server: Welcome

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Welcome

Amazon CloudWatch Application Insights for .NET and SQL Server is a service that helps you detect common problems with your .NET and SQL Server-based applications. It enables you to pinpoint the source of issues in your applications (built with technologies such as Microsoft IIS, .NET, and Microsoft SQL Server), by providing key insights into detected problems.

After you onboard your application, CloudWatch Application Insights for .NET and SQL Server identifies, recommends, and sets up metrics and logs. It continuously analyzes and correlates your metrics and logs for unusual behavior to surface actionable problems with your application. For example, if your application is slow and unresponsive and leading to HTTP 500 errors in your Application Load Balancer (ALB), Application Insights informs you that a memory pressure problem with your SQL Server database is occurring. It bases this analysis on impactful metrics and log errors.

This document was last published on April 3, 2020.
Actions

The following actions are supported:

- CreateApplication (p. 3)
- CreateComponent (p. 6)
- CreateLogPattern (p. 8)
- DeleteApplication (p. 11)
- DeleteComponent (p. 13)
- DeleteLogPattern (p. 15)
- DescribeApplication (p. 17)
- DescribeComponent (p. 19)
- DescribeComponentConfiguration (p. 21)
- DescribeComponentConfigurationRecommendation (p. 24)
- DescribeLogPattern (p. 26)
- DescribeObservation (p. 29)
- DescribeProblem (p. 32)
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- ListApplications (p. 37)
- ListComponents (p. 39)
- ListConfigurationHistory (p. 42)
- ListLogPatterns (p. 45)
- ListLogPatternSets (p. 48)
- ListProblems (p. 51)
- ListTagsForResource (p. 54)
- TagResource (p. 56)
- UntagResource (p. 58)
- UpdateApplication (p. 60)
- UpdateComponent (p. 63)
- UpdateComponentConfiguration (p. 65)
- UpdateLogPattern (p. 68)
CreateApplication

Adds an application that is created from a resource group.

Request Syntax

```json
{
    "CWEMonitorEnabled": boolean,
    "OpsCenterEnabled": boolean,
    "OpsItemSNSTopicArn": "string",
    "ResourceGroupName": "string",
    "Tags": [
        {
            "Key": "string",
            "Value": "string"
        }
    ]
}
```

Request Parameters

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

The request accepts the following data in JSON format.

**CWEMonitorEnabled (p. 3)**

Indicates whether Application Insights can listen to CloudWatch events for the application resources, such as instance terminated, failed deployment, and others.

Type: Boolean

Required: No

**OpsCenterEnabled (p. 3)**

When set to `true`, creates opsitems for any problems detected on an application.

Type: Boolean

Required: No

**OpsItemSNSTopicArn (p. 3)**

The SNS topic provided to Application Insights that is associated to the created opsitem. Allows you to receive notifications for updates to the opsitem.

Type: String


Required: No

**ResourceGroupName (p. 3)**

The name of the resource group.

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

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

Required: Yes

Tags (p. 3)

List of tags to add to the application. tag key (Key) and an associated tag value (Value). The maximum length of a tag key is 128 characters. The maximum length of a tag value is 256 characters.

Type: Array of Tag (p. 87) objects

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

Required: No

Response Syntax

```
{
  "ApplicationInfo": {
    "CWEMonitorEnabled": boolean,
    "LifeCycle": "string",
    "OpsCenterEnabled": boolean,
    "OpsItemSNSTopicArn": "string",
    "Remarks": "string",
    "ResourceGroupName": "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.

ApplicationInfo (p. 4)

Information about the application.

Type: ApplicationInfo (p. 73) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 90).

InternalServerException

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

HTTP Status Code: 400

ResourceInUseException

The resource is already created or in use.

HTTP Status Code: 400

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ResourceNotFoundException

The resource does not exist in the customer account.

HTTP Status Code: 400

TagsAlreadyExistException

Tags are already registered for the specified application ARN.

HTTP Status Code: 400

ValidationException

The parameter is not valid.

HTTP Status Code: 400

See Also

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

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

Creates a custom component by grouping similar standalone instances to monitor.

Request Syntax

```json
{
    "ComponentName": "string",
    "ResourceGroupName": "string",
    "ResourceList": ["string"]
}
```

Request Parameters

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

The request accepts the following data in JSON format.

**ComponentName (p. 6)**

The name of the component.

Type: String

Required: Yes

**ResourceGroupName (p. 6)**

The name of the resource group.

Type: String

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

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

Required: Yes

**ResourceList (p. 6)**

The list of resource ARNs that belong to the component.

Type: Array of strings

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

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see Common Errors (p. 90).
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See Also

InternalServerException
The server encountered an internal error and is unable to complete the request.
HTTP Status Code: 400

ResourceInUseException
The resource is already created or in use.
HTTP Status Code: 400

ResourceNotFoundException
The resource does not exist in the customer account.
HTTP Status Code: 400

ValidationException
The parameter is not valid.
HTTP Status Code: 400

See Also

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

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

Adds an log pattern to a LogPatternSet.

Request Syntax

```json
{
    "Pattern": "string",
    "PatternName": "string",
    "PatternSetName": "string",
    "Rank": number,
    "ResourceGroupName": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

**Pattern (p. 8)**

The log pattern.

Type: String


Required: Yes

**PatternName (p. 8)**

The name of the log pattern.

Type: String


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

Required: Yes

**PatternSetName (p. 8)**

The name of the log pattern set.

Type: String


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

Required: Yes

**Rank (p. 8)**

Rank of the log pattern.

Type: Integer
ResourceGroupName (p. 8)

The name of the resource group.
Type: String
Length Constraints: Minimum length of 1. Maximum length of 256.
Pattern: [a-zA-Z0-9\-_]*

Required: Yes

Response Syntax

```json
{
  "LogPattern": {
    "Pattern": "string",
    "PatternName": "string",
    "PatternSetName": "string",
    "Rank": number,
  },
  "ResourceGroupName": "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.

LogPattern (p. 9)
The successfully created log pattern.
Type: LogPattern (p. 77) object

ResourceGroupName (p. 9)
The name of the resource group.
Type: String
Length Constraints: Minimum length of 1. Maximum length of 256.
Pattern: [a-zA-Z0-9\-_]*

Errors

For information about the errors that are common to all actions, see Common Errors (p. 90).

InternalServerException
The server encountered an internal error and is unable to complete the request.
HTTP Status Code: 400
ResourceInUseException

The resource is already created or in use.

HTTP Status Code: 400

ResourceNotFoundException

The resource does not exist in the customer account.

HTTP Status Code: 400

ValidationException

The parameter is not valid.

HTTP Status Code: 400

See Also

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

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

Removes the specified application from monitoring. Does not delete the application.

Request Syntax

```json
{
    "ResourceGroupName": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

ResourceGroupName (p. 11)

The name of the resource group.

- Type: String
- Pattern: `[a-zA-Z0-9\.-_]`
- Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see Common Errors (p. 90).

BadRequestException

The request is not understood by the server.

HTTP Status Code: 400

InternalServerErrorException

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

HTTP Status Code: 400

ResourceNotFoundException

The resource does not exist in the customer account.

HTTP Status Code: 400

ValidationException

The parameter is not valid.

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HTTP Status Code: 400

See Also

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

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

Ungroups a custom component. When you ungroup custom components, all applicable monitors that are set up for the component are removed and the instances revert to their standalone status.

Request Syntax

```
{
    "ComponentName": "string",
    "ResourceGroupName": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

**ComponentName (p. 13)**

The name of the component.

Type: String

Required: Yes

**ResourceGroupName (p. 13)**

The name of the resource group.

Type: String

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

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

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see Common Errors (p. 90).

**InternalServerException**

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

HTTP Status Code: 400

**ResourceNotFoundException**

The resource does not exist in the customer account.

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ValidationException

The parameter is not valid.

HTTP Status Code: 400

See Also

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

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

Removes the specified log pattern from a LogPatternSet.

Request Syntax

```
{
    "PatternName": "string",
    "PatternSetName": "string",
    "ResourceGroupName": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

**PatternName (p. 15)**

The name of the log pattern.

Type: String


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

Required: Yes

**PatternSetName (p. 15)**

The name of the log pattern set.

Type: String


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

Required: Yes

**ResourceGroupName (p. 15)**

The name of the resource group.

Type: String

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

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

Required: Yes

Response Elements

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

For information about the errors that are common to all actions, see Common Errors (p. 90).

BadRequestException

The request is not understood by the server.

HTTP Status Code: 400

InternalServerErrorException

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

HTTP Status Code: 400

ResourceNotFoundException

The resource does not exist in the customer account.

HTTP Status Code: 400

ValidationException

The parameter is not valid.

HTTP Status Code: 400

See Also

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

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

Describes the application.

Request Syntax

```json
{
    "ResourceGroupName": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

**ResourceGroupName (p. 17)**

The name of the resource group.

Type: String

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

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

Required: Yes

Response Syntax

```json
{
    "ApplicationInfo": {
        "CWEMonitorEnabled": boolean,
        "LifeCycle": "string",
        "OpsCenterEnabled": boolean,
        "OpsItemSNSTopicArn": "string",
        "Remarks": "string",
        "ResourceGroupName": "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.

**ApplicationInfo (p. 17)**

Information about the application.

Type: ApplicationInfo (p. 73) object
Errors

For information about the errors that are common to all actions, see Common Errors (p. 90).

**InternalServerException**

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

HTTP Status Code: 400

**ResourceNotFoundException**

The resource does not exist in the customer account.

HTTP Status Code: 400

**ValidationException**

The parameter is not valid.

HTTP Status Code: 400

See Also

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

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

Describes a component and lists the resources that are grouped together in a component.

Request Syntax

```json
{
   "ComponentName": "string",
   "ResourceGroupName": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

**ComponentName (p. 19)**

The name of the component.

Type: String

Required: Yes

**ResourceGroupName (p. 19)**

The name of the resource group.

Type: String

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

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

Required: Yes

Response Syntax

```json
{
   "ApplicationComponent": {
      "ComponentName": "string",
      "Monitor": boolean,
      "ResourceType": "string",
      "Tier": "string"
   },
   "ResourceList": [ "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.
ApplicationComponent (p. 19)

Describes a standalone resource or similarly grouped resources that the application is made up of.

Type: ApplicationComponent (p. 72) object

ResourceList (p. 19)

The list of resource ARNs that belong to the component.

Type: Array of strings

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

Errors

For information about the errors that are common to all actions, see Common Errors (p. 90).

InternalServerException

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

HTTP Status Code: 400

ResourceNotFoundException

The resource does not exist in the customer account.

HTTP Status Code: 400

ValidationException

The parameter is not valid.

HTTP Status Code: 400

See Also

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

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

Describes the monitoring configuration of the component.

Request Syntax

```json
{
   "ComponentName": "string",
   "ResourceGroupName": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

**ComponentName (p. 21)**

The name of the component.

Type: String

Required: Yes

**ResourceGroupName (p. 21)**

The name of the resource group.

Type: String

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

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

Required: Yes

Response Syntax

```json
{
   "ComponentConfiguration": "string",
   "Monitor": boolean,
   "Tier": "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.

**ComponentConfiguration (p. 21)**

The configuration settings of the component. The value is the escaped JSON of the configuration.
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Errors

For information about the errors that are common to all actions, see Common Errors (p. 90).

InternalServerException

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

HTTP Status Code: 400

ResourceNotFoundException

The resource does not exist in the customer account.

HTTP Status Code: 400

ValidationException

The parameter is not valid.

HTTP Status Code: 400

See Also

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

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

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See Also
DescribeComponentConfigurationRecommendation

Describes the recommended monitoring configuration of the component.

Request Syntax

```json
{
    "ComponentName": "string",
    "ResourceGroupName": "string",
    "Tier": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

**ComponentName (p. 24)**

The name of the component.

Type: String

Required: Yes

**ResourceGroupName (p. 24)**

The name of the resource group.

Type: String

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

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

Required: Yes

**Tier (p. 24)**

The tier of the application component. Supported tiers include DOT_NET_CORE, DOT_NET_WORKER, DOT_NET_WEB, SQL_SERVER, and DEFAULT.

Type: String


Valid Values: DEFAULT | DOT_NET_CORE | DOT_NET_WORKER | DOT_NET_WEB | SQL_SERVER

Required: Yes

Response Syntax

```json
{
    "ComponentConfiguration": "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.

ComponentConfiguration (p. 24)

   The recommended configuration settings of the component. The value is the escaped JSON of the configuration.

   Type: String

   Length Constraints: Minimum length of 1. Maximum length of 10000.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 90).

InternalServerException

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

   HTTP Status Code: 400

ResourceNotFoundException

   The resource does not exist in the customer account.

   HTTP Status Code: 400

ValidationException

   The parameter is not valid.

   HTTP Status Code: 400

See Also

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

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

Describe a specific log pattern from a LogPatternSet.

**Request Syntax**

```json
{
    "PatternName": "string",
    "PatternSetName": "string",
    "ResourceGroupName": "string"
}
```

**Request Parameters**

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

The request accepts the following data in JSON format.

**PatternName (p. 26)**

The name of the log pattern.

*Type: String*

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

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

*Required: Yes*

**PatternSetName (p. 26)**

The name of the log pattern set.

*Type: String*

*Length Constraints: Minimum length of 1. Maximum length of 30.*

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

*Required: Yes*

**ResourceGroupName (p. 26)**

The name of the resource group.

*Type: String*

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

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

*Required: Yes*

**Response Syntax**

```json
{
}
```
"LogPattern": {
  "Pattern": "string",
  "PatternName": "string",
  "PatternSetName": "string",
  "Rank": number
},
"ResourceGroupName": "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.

LogPattern (p. 26)

The successfully created log pattern.

Type: LogPattern (p. 77) object

ResourceGroupName (p. 26)

The name of the resource group.

Type: String

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

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

Errors

For information about the errors that are common to all actions, see Common Errors (p. 90).

InternalServerErrorException

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

HTTP Status Code: 400

ResourceNotFoundException

The resource does not exist in the customer account.

HTTP Status Code: 400

ValidationException

The parameter is not valid.

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
Amazon CloudWatch Application Insights
for .NET and SQL Server Welcome

See Also

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DescribeObservation

Describes an anomaly or error with the application.

Request Syntax

```json
{
   "ObservationId": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

**ObservationId (p. 29)**

The ID of the observation.

Type: String

Length Constraints: Fixed length of 38.

Pattern: o-{0-9a-fA-F}{8}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-\[0-9a-fA-F]{12}

Required: Yes

Response Syntax

```json
{
   "Observation": {
      "CloudWatchEventDetailType": "string",
      "CloudWatchEventId": "string",
      "CloudWatchEventSource": "string",
      "CodeDeployApplication": "string",
      "CodeDeployDeploymentGroup": "string",
      "CodeDeployDeploymentId": "string",
      "CodeDeployInstanceGroupId": "string",
      "CodeDeployState": "string",
      "Ec2State": "string",
      "EndTime": number,
      "HealthEventArn": "string",
      "HealthEventDescription": "string",
      "HealthEventTypeCategory": "string",
      "HealthEventTypeCode": "string",
      "HealthService": "string",
      "Id": "string",
      "LineTime": number,
      "LogFilter": "string",
      "LogGroup": "string",
      "LogText": "string",
      "MetricName": "string",
      "MetricNamespace": "string",
      "SourceARN": "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.

Observation (p. 29)

Information about the observation.

Type: Observation (p. 79) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 90).

InternalServerError

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

HTTP Status Code: 400

ResourceNotFoundException

The resource does not exist in the customer account.

HTTP Status Code: 400

ValidationException

The parameter is not valid.

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

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See Also

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

Describes an application problem.

**Request Syntax**

```json
{
    "ProblemId": "string"
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

**ProblemId (p. 32)**

The ID of the problem.

Type: String

Length Constraints: Fixed length of 38.

Pattern: `p-[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}`

Required: Yes

**Response Syntax**

```json
{
    "Problem": {
        "AffectedResource": "string",
        "EndTime": number,
        "Feedback": {
            "string": "string"
        },
        "Id": "string",
        "Insights": "string",
        "ResourceGroupName": "string",
        "SeverityLevel": "string",
        "StartTime": number,
        "Status": "string",
        "Title": "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.
Problem (p. 32)
Information about the problem.
Type: Problem (p. 84) object

Errors
For information about the errors that are common to all actions, see Common Errors (p. 90).

InternalServerException
The server encountered an internal error and is unable to complete the request.
HTTP Status Code: 400

ResourceNotFoundException
The resource does not exist in the customer account.
HTTP Status Code: 400

ValidationException
The parameter is not valid.
HTTP Status Code: 400

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

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

Describes the anomalies or errors associated with the problem.

Request Syntax

```
{
  "ProblemId": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

ProblemId (p. 34)

The ID of the problem.

Type: String

Length Constraints: Fixed length of 38.

Pattern: p-[0-9a-fA-F]{8}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{12}

Required: Yes

Response Syntax

```
{
  "RelatedObservations": {
    "ObservationList": [
      {
        "CloudWatchEventDetailType": "string",
        "CloudWatchEventId": "string",
        "CodeDeployApplication": "string",
        "CodeDeployDeploymentGroup": "string",
        "CodeDeployDeploymentId": "string",
        "CodeDeployInstanceGroupId": "string",
        "CodeDeployState": "string",
        "Ec2State": "string",
        "EndTime": number,
        "HealthEventArn": "string",
        "HealthEventDescription": "string",
        "HealthEventTypeCategory": "string",
        "HealthEventTypeCode": "string",
        "HealthService": "string",
        "Id": "string",
        "LineTime": number,
        "LogFilter": "string",
        "LogGroup": "string",
        "LogText": "string",
        "MetricName": "string",
```

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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.

**RelatedObservations (p. 34)**

Observations related to the problem.

Type: **RelatedObservations (p. 86)** object

**Errors**

For information about the errors that are common to all actions, see **Common Errors (p. 90).**

**InternalServerException**

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

HTTP Status Code: 400

**ResourceNotFoundException**

The resource does not exist in the customer account.

HTTP Status Code: 400

**ValidationException**

The parameter is not valid.

HTTP Status Code: 400

**See Also**

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

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

Lists the IDs of the applications that you are monitoring.

Request Syntax

```
{
    "MaxResults": number,
    "NextToken": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

MaxResults (p. 37)

The maximum number of results to return in a single call. To retrieve the remaining results, make another call with the returned NextToken value.

Type: Integer


Required: No

NextToken (p. 37)

The token to request the next page of results.

Type: String

Required: No

Response Syntax

```
{
    "ApplicationInfoList": [
        {
            "CWEMonitorEnabled": boolean,
            "LifeCycle": "string",
            "OpsCenterEnabled": boolean,
            "OpsItemSNSTopicArn": "string",
            "Remarks": "string",
            "ResourceGroupName": "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.

**ApplicationInfoList (p. 37)**

The list of applications.

Type: Array of ApplicationInfo (p. 73) objects

**NextToken (p. 37)**

The token used to retrieve the next page of results. This value is `null` when there are no more results to return.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Errors (p. 90).

**InternalServerException**

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

HTTP Status Code: 400

**ValidationException**

The parameter is not valid.

HTTP Status Code: 400

## See Also

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

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

Lists the auto-grouped, standalone, and custom components of the application.

Request Syntax

```json
{
  "MaxResults": number,
  "NextToken": "string",
  "ResourceGroupName": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

**MaxResults (p. 39)**

The maximum number of results to return in a single call. To retrieve the remaining results, make another call with the returned `NextToken` value.

Type: Integer


Required: No

**NextToken (p. 39)**

The token to request the next page of results.

Type: String

Required: No

**ResourceGroupName (p. 39)**

The name of the resource group.

Type: String

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

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

Required: Yes

Response Syntax

```json
{
  "ApplicationComponentList": [
  {
    "ComponentName": "string",
    "Monitor": boolean,
  }
}
```

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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.

ApplicationComponentList (p. 39)

The list of application components.

Type: Array of ApplicationComponent (p. 72) objects

NextToken (p. 39)

The token to request the next page of results.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 90).

InternalServerException

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

HTTP Status Code: 400

ResourceNotFoundException

The resource does not exist in the customer account.

HTTP Status Code: 400

ValidationException

The parameter is not valid.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
Amazon CloudWatch Application Insights
for .NET and SQL Server Welcome
See Also

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

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ListConfigurationHistory

Lists the INFO, WARN, and ERROR events for periodic configuration updates performed by Application Insights. Examples of events represented are:

- **INFO**: creating a new alarm or updating an alarm threshold.
- **WARN**: alarm not created due to insufficient data points used to predict thresholds.
- **ERROR**: alarm not created due to permission errors or exceeding quotas.

Request Syntax

```
{
    "EndTime": number,
    "EventStatus": "string",
    "MaxResults": number,
    "NextToken": "string",
    "ResourceGroupName": "string",
    "StartTime": number
}
```

Request Parameters

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

The request accepts the following data in JSON format.

**EndTime (p. 42)**

The end time of the event.

Type: Timestamp

Required: No

**EventStatus (p. 42)**

The status of the configuration update event. Possible values include INFO, WARN, and ERROR.

Type: String

Valid Values: INFO | WARN | ERROR

Required: No

**MaxResults (p. 42)**

The maximum number of results returned by ListConfigurationHistory in paginated output. When this parameter is used, ListConfigurationHistory returns only MaxResults in a single page along with a NextToken response element. The remaining results of the initial request can be seen by sending another ListConfigurationHistory request with the returned NextToken value. If this parameter is not used, then ListConfigurationHistory returns all results.

Type: Integer

Required: No

**NextToken (p. 42)**

The `NextToken` value returned from a previous paginated `ListConfigurationHistory` 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. This value is null when there are no more results to return.

Type: String

Required: No

**ResourceGroupName (p. 42)**

Resource group to which the application belongs.

Type: String

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

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

Required: No

**StartTime (p. 42)**

The start time of the event.

Type: Timestamp

Required: No

**Response Syntax**

```
{
  "EventList": [
    {
      "EventDetail": "string",
      "EventResourceName": "string",
      "EventResourceType": "string",
      "EventStatus": "string",
      "EventTime": number,
      "MonitoredResourceARN": "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.

**EventList (p. 43)**

The list of configuration events and their corresponding details.

Type: Array of `ConfigurationEvent (p. 75)` objects
NextToken (p. 43)

The `NextToken` value to include in a future `ListConfigurationHistory` request. When the results of a `ListConfigurationHistory` 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

Errors

For information about the errors that are common to all actions, see Common Errors (p. 90).

**InternalServerException**

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

HTTP Status Code: 400

**ResourceNotFoundException**

The resource does not exist in the customer account.

HTTP Status Code: 400

**ValidationException**

The parameter is not valid.

HTTP Status Code: 400

See Also

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

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

Lists the log patterns in the specific log LogPatternSet.

Request Syntax

```json
{
   "MaxResults": number,
   "NextToken": "string",
   "PatternSetName": "string",
   "ResourceGroupName": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

MaxResults (p. 45)

The maximum number of results to return in a single call. To retrieve the remaining results, make another call with the returned NextToken value.

Type: Integer


Required: No

NextToken (p. 45)

The token to request the next page of results.

Type: String

Required: No

PatternSetName (p. 45)

The name of the log pattern set.

Type: String


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

Required: No

ResourceGroupName (p. 45)

The name of the resource group.

Type: String

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

Pattern: [a-zA-Z0-9\.\-_]*
Response Syntax

```json
{
  "LogPatterns": [
    {
      "Pattern": "string",
      "PatternName": "string",
      "PatternSetName": "string",
      "Rank": number
    }
  ],
  "NextToken": "string",
  "ResourceGroupName": "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.

**LogPatterns (p. 46)**

The list of log patterns.

Type: Array of LogPattern (p. 77) objects

**NextToken (p. 46)**

The token used to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

**ResourceGroupName (p. 46)**

The name of the resource group.

Type: String

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

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

Errors

For information about the errors that are common to all actions, see Common Errors (p. 90).

**InternalServerException**

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

HTTP Status Code: 400

**ResourceNotFoundException**

The resource does not exist in the customer account.
HTTP Status Code: 400

**ValidationException**

The parameter is not valid.

HTTP Status Code: 400

**See Also**

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

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

Lists the log pattern sets in the specific application.

Request Syntax

```json
{
   "MaxResults": number,
   "NextToken": "string",
   "ResourceGroupName": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

MaxResults (p. 48)

The maximum number of results to return in a single call. To retrieve the remaining results, make another call with the returned NextToken value.

Type: Integer


Required: No

NextToken (p. 48)

The token to request the next page of results.

Type: String

Required: No

ResourceGroupName (p. 48)

The name of the resource group.

Type: String

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

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

Required: Yes

Response Syntax

```json
{
   "LogPatternSets": [ "string" ],
   "NextToken": "string",
   "ResourceGroupName": "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.

LogPatternSets (p. 48)

The list of log pattern sets.

Type: Array of strings


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

NextToken (p. 48)

The token used to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

ResourceGroupName (p. 48)

The name of the resource group.

Type: String

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

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

Errors

For information about the errors that are common to all actions, see Common Errors (p. 90).

InternalServerException

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

HTTP Status Code: 400

ResourceNotFoundException

The resource does not exist in the customer account.

HTTP Status Code: 400

ValidationException

The parameter is not valid.

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
See Also

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

Lists the problems with your application.

Request Syntax

```json
{
  "EndTime": number,
  "MaxResults": number,
  "NextToken": "string",
  "ResourceGroupName": "string",
  "StartTime": number
}
```

Request Parameters

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

The request accepts the following data in JSON format.

EndTime (p. 51)

The time when the problem ended, in epoch seconds. If not specified, problems within the past seven days are returned.

Type: Timestamp

Required: No

MaxResults (p. 51)

The maximum number of results to return in a single call. To retrieve the remaining results, make another call with the returned NextToken value.

Type: Integer


Required: No

NextToken (p. 51)

The token to request the next page of results.

Type: String

Required: No

ResourceGroupName (p. 51)

The name of the resource group.

Type: String

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

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

Required: No
**Response Syntax**

```
{
    "NextToken": "string",
    "ProblemList": [
        {
            "AffectedResource": "string",
            "EndTime": number,
            "Feedback": {
                "string": "string"
            },
            "Id": "string",
            "Insights": "string",
            "ResourceGroupName": "string",
            "SeverityLevel": "string",
            "StartTime": number,
            "Status": "string",
            "Title": "string"
        }
    ]
}
```

**Response Elements**

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

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

**NextToken (p. 52)**

The token used to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

**ProblemList (p. 52)**

The list of problems.

Type: Array of Problem (p. 84) objects

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 90).

**InternalServerException**

The server encountered an internal error and is unable to complete the request.
HTTP Status Code: 400

**ResourceNotFoundException**

The resource does not exist in the customer account.

HTTP Status Code: 400

**ValidationException**

The parameter is not valid.

HTTP Status Code: 400

**See Also**

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

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

Retrieve a list of the tags (keys and values) that are associated with a specified application. A tag is a label that you optionally define and associate with an application. Each tag consists of a required tag key and an optional associated tag value. A tag key is a general label that acts as a category for more specific tag values. A tag value acts as a descriptor within a tag key.

Request Syntax

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

Request Parameters

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

The request accepts the following data in JSON format.

**ResourceARN (p. 54)**

The Amazon Resource Name (ARN) of the application that you want to retrieve tag information for.

Type: String

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

Required: Yes

Response Syntax

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

Response Elements

If the action is successful, the service sends back an HTTP 200 response. The following data is returned in JSON format by the service.

**Tags (p. 54)**

An array that lists all the tags that are associated with the application. Each tag consists of a required tag key (Key) and an associated tag value (Value).

Type: Array of Tag (p. 87) objects

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

For information about the errors that are common to all actions, see Common Errors (p. 90).

ResourceNotFoundException

The resource does not exist in the customer account.

HTTP Status Code: 400

ValidationException

The parameter is not valid.

HTTP Status Code: 400

See Also

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

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

Add one or more tags (keys and values) to a specified application. A tag is a label that you optionally define and associate with an application. Tags can help you categorize and manage application in different ways, such as by purpose, owner, environment, or other criteria.

Each tag consists of a required tag key and an associated tag value, both of which you define. A tag key is a general label that acts as a category for more specific tag values. A tag value acts as a descriptor within a tag key.

Request Syntax

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

Request Parameters

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

The request accepts the following data in JSON format.

**ResourceARN (p. 56)**

The Amazon Resource Name (ARN) of the application that you want to add one or more tags to.

Type: String

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

Required: Yes

**Tags (p. 56)**

A list of tags that to add to the application. A tag consists of a required tag key (Key) and an associated tag value (Value). The maximum length of a tag key is 128 characters. The maximum length of a tag value is 256 characters.

Type: Array of Tag (p. 87) objects

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

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see Common Errors (p. 90).
ResourceNotFoundException

The resource does not exist in the customer account.

HTTP Status Code: 400

TooManyTagsException

The number of the provided tags is beyond the limit, or the number of total tags you are trying to attach to the specified resource exceeds the limit.

HTTP Status Code: 400

ValidationException

The parameter is not valid.

HTTP Status Code: 400

See Also

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

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

Remove one or more tags (keys and values) from a specified application.

Request Syntax

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

Request Parameters

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

The request accepts the following data in JSON format.

**ResourceARN (p. 58)**

The Amazon Resource Name (ARN) of the application that you want to remove one or more tags from.

Type: String

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

Required: Yes

**TagKeys (p. 58)**

The tags (tag keys) that you want to remove from the resource. When you specify a tag key, the action removes both that key and its associated tag value.

To remove more than one tag from the application, append the TagKeys parameter and argument for each additional tag to remove, separated by an ampersand.

Type: Array of strings

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


Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see Common Errors (p. 90).

**ResourceNotFoundException**

The resource does not exist in the customer account.
HTTP Status Code: 400

ValidationException

The parameter is not valid.

HTTP Status Code: 400

See Also

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

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

Updates the application.

Request Syntax

```json
{
  "CWEMonitorEnabled": boolean,
  "OpsCenterEnabled": boolean,
  "OpsItemSNSTopicArn": "string",
  "RemoveSNSTopic": boolean,
  "ResourceGroupName": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

**CWEMonitorEnabled (p. 60)**

Indicates whether Application Insights can listen to CloudWatch events for the application resources, such as instance terminated, failed deployment, and others.

Type: Boolean

Required: No

**OpsCenterEnabled (p. 60)**

When set to true, creates opsitems for any problems detected on an application.

Type: Boolean

Required: No

**OpsItemSNSTopicArn (p. 60)**

The SNS topic provided to Application Insights that is associated to the created opsitem. Allows you to receive notifications for updates to the opsitem.

Type: String


Required: No

**RemoveSNSTopic (p. 60)**

Disassociates the SNS topic from the opsitem created for detected problems.

Type: Boolean

Required: No

**ResourceGroupName (p. 60)**

The name of the resource group.

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

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

Required: Yes

Response Syntax

```
{
  "ApplicationInfo": {
    "CWEMonitorEnabled": boolean,
    "LifeCycle": "string",
    "OpsCenterEnabled": boolean,
    "OpsItemSNSTopicArn": "string",
    "Remarks": "string",
    "ResourceGroupName": "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.

ApplicationInfo (p. 61)

Information about the application.

Type: ApplicationInfo (p. 73) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 90).

InternalServerException

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

HTTP Status Code: 400

ResourceNotFoundException

The resource does not exist in the customer account.

HTTP Status Code: 400

ValidationException

The parameter is not valid.

HTTP Status Code: 400

See Also

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

Updates the custom component name and/or the list of resources that make up the component.

Request Syntax

```json
{
   "ComponentName": "string",
   "NewComponentName": "string",
   "ResourceGroupName": "string",
   "ResourceList": [ "string" ]
}
```

Request Parameters

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

The request accepts the following data in JSON format.

ComponentName (p. 63)

The name of the component.

Type: String

Required: Yes

NewComponentName (p. 63)

The new name of the component.

Type: String

Required: No

ResourceGroupName (p. 63)

The name of the resource group.

Type: String

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

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

Required: Yes

ResourceList (p. 63)

The list of resource ARNs that belong to the component.

Type: Array of strings

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

Required: No
Response Elements

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

Errors

For information about the errors that are common to all actions, see Common Errors (p. 90).

InternalServerException

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

HTTP Status Code: 400

ResourceInUseException

The resource is already created or in use.

HTTP Status Code: 400

ResourceNotFoundException

The resource does not exist in the customer account.

HTTP Status Code: 400

ValidationException

The parameter is not valid.

HTTP Status Code: 400

See Also

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

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

Updates the monitoring configurations for the component. The configuration input parameter is an escaped JSON of the configuration and should match the schema of what is returned by DescribeComponentConfigurationRecommendation.

Request Syntax

```
{
    "ComponentConfiguration": "string",
    "ComponentName": "string",
    "Monitor": boolean,
    "ResourceGroupName": "string",
    "Tier": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

ComponentConfiguration (p. 65)

The configuration settings of the component. The value is the escaped JSON of the configuration. For more information about the JSON format, see Working with JSON. You can send a request to DescribeComponentConfigurationRecommendation to see the recommended configuration for a component. For the complete format of the component configuration file, see Component Configuration.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 10000.

Required: No

ComponentName (p. 65)

The name of the component.

Type: String

Required: Yes

Monitor (p. 65)

Indicates whether the application component is monitored.

Type: Boolean

Required: No

ResourceGroupName (p. 65)

The name of the resource group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.
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. 90).

**InternalServerException**

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

HTTP Status Code: 400

**ResourceNotFoundException**

The resource does not exist in the customer account.

HTTP Status Code: 400

**ValidationException**

The parameter is not valid.

HTTP Status Code: 400

See Also

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

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

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• AWS SDK for Ruby V3
UpdateLogPattern

Adds a log pattern to a LogPatternSet.

Request Syntax

```
{
    "Pattern": "string",
    "PatternName": "string",
    "PatternSetName": "string",
    "Rank": number,
    "ResourceGroupName": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

**Pattern (p. 68)**

The log pattern.

Type: String


Required: No

**PatternName (p. 68)**

The name of the log pattern.

Type: String


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

Required: Yes

**PatternSetName (p. 68)**

The name of the log pattern set.

Type: String


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

Required: Yes

**Rank (p. 68)**

Rank of the log pattern.

Type: Integer
Required: No

**ResourceGroupName (p. 68)**

The name of the resource group.

Type: String

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

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

Required: Yes

**Response Syntax**

```
{
    "LogPattern": {
        "Pattern": "string",
        "PatternName": "string",
        "PatternSetName": "string",
        "Rank": number
    },
    "ResourceGroupName": "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.

**LogPattern (p. 69)**

The successfully created log pattern.

Type: LogPattern (p. 77) object

**ResourceGroupName (p. 69)**

The name of the resource group.

Type: String

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

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

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 90).

**InternalServerException**

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

HTTP Status Code: 400
ResourceInUseException

The resource is already created or in use.

HTTP Status Code: 400

ResourceNotFoundException

The resource does not exist in the customer account.

HTTP Status Code: 400

ValidationException

The parameter is not valid.

HTTP Status Code: 400

See Also

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

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

The Amazon CloudWatch Application Insights 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:

- ApplicationComponent (p. 72)
- ApplicationInfo (p. 73)
- ConfigurationEvent (p. 75)
- LogPattern (p. 77)
- Observation (p. 79)
- Problem (p. 84)
- RelatedObservations (p. 86)
- Tag (p. 87)
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ApplicationComponent

ApplicationComponent

Describes a standalone resource or similarly grouped resources that the application is made up of.

Contents

ComponentName

The name of the component.
Type: String
Required: No

Monitor

Indicates whether the application component is monitored.
Type: Boolean
Required: No

ResourceType

The resource type. Supported resource types include EC2 instances, Auto Scaling group, Classic ELB, Application ELB, and SQS Queue.
Type: String
Required: No

Tier

The stack tier of the application component.
Type: String
Valid Values: DEFAULT | DOT_NET_CORE | DOT_NET_WORKER | DOT_NET_WEB | SQL_SERVER
Required: No

See Also

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

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

Describes the status of the application.

Contents

CWEMonitorEnabled

Indicates whether Application Insights can listen to CloudWatch events for the application resources, such as instance terminated, failed deployment, and others.

Type: Boolean

Required: No

LifeCycle

The lifecycle of the application.

Type: String

Required: No

OpsCenterEnabled

Indicates whether Application Insights will create opsItems for any problem detected by Application Insights for an application.

Type: Boolean

Required: No

OpsItemSNSTopicArn

The SNS topic provided to Application Insights that is associated to the created opsItems to receive SNS notifications for opsItem updates.

Type: String


Required: No

Remarks

The issues on the user side that block Application Insights from successfully monitoring an application. Example remarks include:

- “Configuring application, detected 1 Errors, 3 Warnings”
- “Configuring application, detected 1 Unconfigured Components”

Type: String

Required: No

ResourceGroupName

The name of the resource group used for the application.

Type: String

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

Pattern: [a-zA-Z0-9\._\-]*
Required: No

See Also

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

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

The event information.

Contents

EventDetail

The details of the event in plain text.

Type: String

Required: No

EventResourceName

The name of the resource Application Insights attempted to configure.

Type: String

Required: No

EventResourceType

The resource type that Application Insights attempted to configure, for example, CLOUDWATCH_ALARM.

Type: String

Valid Values: CLOUDWATCH_ALARM | CLOUDFORMATION | SSM_ASSOCIATION

Required: No

EventStatus

The status of the configuration update event. Possible values include INFO, WARN, and ERROR.

Type: String

Valid Values: INFO | WARN | ERROR

Required: No

EventTime

The timestamp of the event.

Type: Timestamp

Required: No

MonitoredResourceARN

The resource monitored by Application Insights.

Type: String

Required: No

See Also

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

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

An object that defines the log patterns that belongs to a LogPatternSet.

Contents

Pattern

A regular expression that defines the log pattern. A log pattern can contain at most 50 characters, and it cannot be empty.

Type: String


Required: No

PatternName

The name of the log pattern. A log pattern name can contain at most 50 characters, and it cannot be empty. The characters can be Unicode letters, digits or one of the following symbols: period, dash, underscore.

Type: String


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

Required: No

PatternSetName

The name of the log pattern. A log pattern name can contain at most 30 characters, and it cannot be empty. The characters can be Unicode letters, digits or one of the following symbols: period, dash, underscore.

Type: String


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

Required: No

Rank

Rank of the log pattern.

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
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- AWS SDK for Java
- AWS SDK for Ruby V3
Observation

Describes an anomaly or error with the application.

Contents

CloudWatchEventDetailType

The detail type of the CloudWatch Event-based observation, for example, EC2 Instance State-change Notification.

Type: String
Required: No

CloudWatchEventId

The ID of the CloudWatch Event-based observation related to the detected problem.

Type: String
Required: No

CloudWatchEventSource

The source of the CloudWatch Event.

Type: String

Valid Values: EC2 | CODE_DEPLOY | HEALTH
Required: No

CodeDeployApplication

The CodeDeploy application to which the deployment belongs.

Type: String
Required: No

CodeDeployDeploymentGroup

The deployment group to which the CodeDeploy deployment belongs.

Type: String
Required: No

CodeDeployDeploymentId

The deployment ID of the CodeDeploy-based observation related to the detected problem.

Type: String
Required: No

CodeDeployInstanceGroupId

The instance group to which the CodeDeploy instance belongs.

Type: String
Required: No
**CodeDeployState**

The status of the CodeDeploy deployment, for example SUCCESS or FAILURE.

Type: String

Required: No

**Ec2State**

The state of the instance, such as STOPPING or TERMINATING.

Type: String

Required: No

**EndTime**

The time when the observation ended, in epoch seconds.

Type: Timestamp

Required: No

**HealthEventArn**

The Amazon Resource Name (ARN) of the AWS Health Event-based observation.

Type: String

Required: No

**HealthEventDescription**

The description of the AWS Health event provided by the service, such as Amazon EC2.

Type: String

Required: No

**HealthEventTypeCategory**

The category of the AWS Health event, such as issue.

Type: String

Required: No

**HealthEventTypeCode**

The type of the AWS Health event, for example, AWS_EC2_POWER_CONNECTIVITY_ISSUE.

Type: String

Required: No

**HealthService**

The service to which the AWS Health Event belongs, such as EC2.

Type: String

Required: No

**Id**

The ID of the observation type.
Type: String

Length Constraints: Fixed length of 38.

Pattern: o-[0-9a-fA-F]{8}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{12}

Required: No

LineTime

The timestamp in the CloudWatch Logs that specifies when the matched line occurred.

Type: Timestamp

Required: No

LogFilter

The log filter of the observation.

Type: String

Valid Values: ERROR | WARN | INFO

Required: No

LogGroup

The log group name.

Type: String

Required: No

LogText

The log text of the observation.

Type: String

Required: No

MetricName

The name of the observation metric.

Type: String

Required: No

MetricNamespace

The namespace of the observation metric.

Type: String

Required: No

SourceARN

The source resource ARN of the observation.

Type: String

Required: No
SourceType

The source type of the observation.
Type: String
Required: No

StartTime

The time when the observation was first detected, in epoch seconds.
Type: Timestamp
Required: No

Unit

The unit of the source observation metric.
Type: String
Required: No

Value

The value of the source observation metric.
Type: Double
Required: No

XRayErrorPercent

The X-Ray request error percentage for this node.
Type: Integer
Required: No

XRayFaultPercent

The X-Ray request fault percentage for this node.
Type: Integer
Required: No

XRayNodeName

The name of the X-Ray node.
Type: String
Required: No

XRayNodeType

The type of the X-Ray node.
Type: String
Required: No

XRayRequestAverageLatency

The X-Ray node request average latency for this node.
**XRayRequestCount**

The X-Ray request count for this node.

Type: Integer

Required: No

**XRayThrottlePercent**

The X-Ray request throttle percentage for this node.

Type: Integer

Required: No

**See Also**

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

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

Describes a problem that is detected by correlating observations.

Contents

AffectedResource

The resource affected by the problem.

Type: String

Required: No

EndTime

The time when the problem ended, in epoch seconds.

Type: Timestamp

Required: No

Feedback

Feedback provided by the user about the problem.

Type: String to string map

Valid Keys: INSIGHTS_FEEDBACK

Valid Values: NOT_SPECIFIED | USEFUL | NOT_USEFUL

Required: No

Id

The ID of the problem.

Type: String

Length Constraints: Fixed length of 38.

Pattern: p-[0-9a-fA-F]{8}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{12}

Required: No

Insights

A detailed analysis of the problem using machine learning.

Type: String

Required: No

ResourceGroupName

The name of the resource group affected by the problem.

Type: String

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

Pattern: [a-zA-Z0-9\.-_]*
Required: No

**SeverityLevel**

A measure of the level of impact of the problem.

Type: String

Valid Values: Low | Medium | High

Required: No

**StartTime**

The time when the problem started, in epoch seconds.

Type: Timestamp

Required: No

**Status**

The status of the problem.

Type: String

Valid Values: IGNORE | RESOLVED | PENDING

Required: No

**Title**

The name of the problem.

Type: String

Required: No

**See Also**

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

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

Describes observations related to the problem.

Contents

ObservationList

The list of observations related to the problem.

Type: Array of Observation (p. 79) objects

Required: No

See Also

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

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

An object that defines the tags associated with an application. A tag is a label that you optionally define and associate with an application. Tags can help you categorize and manage resources in different ways, such as by purpose, owner, environment, or other criteria.

Each tag consists of a required tag key and an associated tag value, both of which you define. A tag key is a general label that acts as a category for a more specific tag value. A tag value acts as a descriptor within a tag key. A tag key can contain as many as 128 characters. A tag value can contain as many as 256 characters. The characters can be Unicode letters, digits, white space, or one of the following symbols: _ : / = + -. The following additional restrictions apply to tags:

- Tag keys and values are case sensitive.
- For each associated resource, each tag key must be unique and it can have only one value.
- The aws: prefix is reserved for use by AWS; you can't use it in any tag keys or values that you define. In addition, you can't edit or remove tag keys or values that use this prefix.

Contents

Key

One part of a key-value pair that defines a tag. The maximum length of a tag key is 128 characters. The minimum length is 1 character.

Type: String


Required: Yes

Value

The optional part of a key-value pair that defines a tag. The maximum length of a tag value is 256 characters. The minimum length is 0 characters. If you don't want an application to have a specific tag value, don't specify a value for this parameter.

Type: String

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

Required: Yes

See Also

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

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

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

Required: Conditional

**X-Amz-Date**

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

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

Type: string

Required: Conditional
not required. When X-Amz-Date is used, it always overrides the value of the Date header. For more information, see Handling Dates in Signature Version 4 in the Amazon Web Services General Reference.

Type: string
Required: Conditional

X-Amz-Security-Token

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

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

Type: string
Required: Conditional

X-Amz-Signature

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

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

Type: string
Required: Conditional

X-Amz-SignedHeaders

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

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

Type: string
Required: Conditional
Common Errors

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

**AccessDeniedException**
You do not have sufficient access to perform this action.

HTTP Status Code: 400

**IncompleteSignature**
The request signature does not conform to AWS standards.

HTTP Status Code: 400

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

HTTP Status Code: 500

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

HTTP Status Code: 400

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

HTTP Status Code: 403

**InvalidParameterCombination**
Parameters that must not be used together were used together.

HTTP Status Code: 400

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

HTTP Status Code: 400

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

HTTP Status Code: 400

**MalformedQueryString**
The query string contains a syntax error.

HTTP Status Code: 404

**MissingAction**
The request is missing an action or a required parameter.

HTTP Status Code: 400
MissingAuthenticationToken

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

HTTP Status Code: 403

MissingParameter

A required parameter for the specified action is not supplied.

HTTP Status Code: 400

OptInRequired

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

HTTP Status Code: 403

RequestExpired

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

HTTP Status Code: 400

ServiceUnavailable

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

HTTP Status Code: 503

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 400

ValidationError

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

HTTP Status Code: 400