Amazon CloudWatch Application Insights

Welcome

API Version 2018-11-25

aws

Amazon CloudWatch Application Insights: Welcome

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Welcome

Amazon CloudWatch Application Insights is a service that helps you detect common problems with your 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 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 October 6, 2021.

Actions

The following actions are supported:

CreateApplication

Adds an application that is created from a resource group.

Request Syntax

```
{
    "AutoConfigEnabled": boolean,
    "AutoCreate": boolean,
    "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. 93).

The request accepts the following data in JSON format.

AutoConfigEnabled (p. 3)

Indicates whether Application Insights automatically configures unmonitored resources in the
resource group.

Type: Boolean

Required: No

AutoCreate (p. 3)

Configures all of the resources in the resource group by applying the recommended configurations.

Type: Boolean

Required: No

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

Length Constraints: Minimum length of 20. Maximum length of 300.

Pattern: `^arn:aws(-\w+)*:[\w\d-]+:([\w\d-]*)?:[\w\d_-]*([:/].+)*$`

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: No

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. 92) objects

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

Required: No

Response Syntax

```
{
   "ApplicationInfo": {
      "AutoConfigEnabled": boolean,
      "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. 76) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 95).

AccessDeniedException

User does not have permissions to perform this action.

HTTP Status Code: 400

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

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 V2
- 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

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 93).

The request accepts the following data in JSON format.

ComponentName (p. 6)

> The name of the component.
>
> Type: String
>
> Length Constraints: Minimum length of 1. Maximum length of 128.
>
> Pattern: `^[\d\w\-_\.+]*$`
>
> 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.
>
> Pattern: `^arn:aws(-\w+)*:[\w\d-]+:([\w\d-]*)?:[\w\d_-]*([:/].+)*$`
>
> 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. 95).

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 V2
- 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

```
{
    "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. 93).

The request accepts the following data in JSON format.

Pattern (p. 8)

The log pattern. The pattern must be DFA compatible. Patterns that utilize forward lookahead or backreference constructions are not supported.

Type: String

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

Pattern: `[\S\s]+`

Required: Yes

PatternName (p. 8)

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. 8)

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

Rank (p. 8)

Rank of the log pattern. Must be a value between `1` and `1,000,000`. The patterns are sorted by rank, so we recommend that you set your highest priority patterns with the lowest rank. A pattern

of rank `1` will be the first to get matched to a log line. A pattern of rank `1,000,000` will be last to get matched. When you configure custom log patterns from the console, a `Low` severity pattern translates to a `750,000` rank. A `Medium` severity pattern translates to a `500,000` rank. And a `High` severity pattern translates to a `250,000` rank. Rank values less than `1` or greater than `1,000,000` are reserved for AWS-provided patterns.

Type: Integer

Required: Yes

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

```
{
    "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. 80) 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. 95).

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 V2
- 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

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 93).

The request accepts the following data in JSON format.

ResourceGroupName (p. 11)

>   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. 95).

BadRequestException

>   The request is not understood by the server.
>
>   HTTP Status Code: 400

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 V2
- 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. 93).

The request accepts the following data in JSON format.

ComponentName (p. 13)

> The name of the component.
>
> Type: String
>
> Length Constraints: Minimum length of 1. Maximum length of 128.
>
> Pattern: `^[\d\w\-_\.+]*$`
>
> 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. 95).

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 V2
- 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. 93).

The request accepts the following data in JSON format.

PatternName (p. 15)

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. 15)

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. 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. 95).

BadRequestException

The request is not understood by the server.

HTTP Status Code: 400

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

DescribeApplication

Describes the application.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common
Parameters (p. 93).

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

```
{
    "ApplicationInfo": {
        "AutoConfigEnabled": boolean,
        "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. 76) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 95).

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 V2
- 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

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

Request Parameters

For information about the parameters that are common to all actions, see Common
Parameters (p. 93).

The request accepts the following data in JSON format.

ComponentName (p. 19)

>   The name of the component.

>   Type: String

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

>   Pattern: `(?:^[\d\w\-_\.+]*$)|(?:^arn:aws(-\w+)*:[\w\d-]+:([\w\d-]*)?:[\w`
>   `\d_-]*([:/].+)*$)`

>   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

```
{
    "ApplicationComponent": {
        "ComponentName": "string",
        "ComponentRemarks": "string",
        "DetectedWorkload": {
            "string" : {
                "string" : "string"
            }
        },
        "Monitor": boolean,
        "OsType": "string",
        "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. 74) 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.

> Pattern: ^arn:aws(-\w+)*:[\w\d-]+:([\w\d-]*)?:[\w\d_-]*([:/].+)*$

Errors

For information about the errors that are common to all actions, see Common Errors (p. 95).

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 V2

- [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

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 93).

The request accepts the following data in JSON format.

ComponentName (p. 22)

> The name of the component.
>
> Type: String
>
> Length Constraints: Minimum length of 1. Maximum length of 1011.
>
> Pattern: `(?:^[\d\w\-_\.+]*$)|(?:^arn:aws(-\w+)*:[\w\d-]+:([\w\d-]*)?:[\w\d_-]*([:/].+)*$)`
>
> Required: Yes

ResourceGroupName (p. 22)

> 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

```
{
    "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. 22)

The 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.

Pattern: `[\S\s]+`

Monitor (p. 22)

Indicates whether the application component is monitored.

Type: Boolean

Tier (p. 22)

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

Type: String

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

Valid Values: `CUSTOM | DEFAULT | DOT_NET_CORE | DOT_NET_WORKER | DOT_NET_WEB_TIER | DOT_NET_WEB | SQL_SERVER | SQL_SERVER_ALWAYSON_AVAILABILITY_GROUP | MYSQL | POSTGRESQL | JAVA_JMX | ORACLE`

Errors

For information about the errors that are common to all actions, see Common Errors (p. 95).

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

DescribeComponentConfigurationRecommendation

Describes the recommended monitoring configuration of the component.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common
Parameters (p. 93).

The request accepts the following data in JSON format.

ComponentName (p. 25)

The name of the component.

Type: String

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

Pattern: `(?:^[\d\w\-_\.+]*$)|(?:^arn:aws(-\w+)*:[\w\d-]+:([\w\d-]*)?:[\w\d_-]*([:/].+)*$)`

Required: Yes

ResourceGroupName (p. 25)

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. 25)

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

Type: String

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

Valid Values: `CUSTOM | DEFAULT | DOT_NET_CORE | DOT_NET_WORKER | DOT_NET_WEB_TIER | DOT_NET_WEB | SQL_SERVER | SQL_SERVER_ALWAYSON_AVAILABILITY_GROUP | MYSQL | POSTGRESQL | JAVA_JMX | ORACLE`

Required: Yes

Response Syntax

```
{
    "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. 26)

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.

Pattern: [\S\s]+

Errors

For information about the errors that are common to all actions, see Common Errors (p. 95).

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 V2
- 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

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 93).

The request accepts the following data in JSON format.

PatternName (p. 28)

> 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. 28)

> 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. 28)

> 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. 28)

    The successfully created log pattern.

    Type: LogPattern (p. 80) object

ResourceGroupName (p. 28)

    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. 95).

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 V2
- 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

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 93).

The request accepts the following data in JSON format.

ObservationId (p. 31)

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

```
{
   "Observation": {
      "CloudWatchEventDetailType": "string",
      "CloudWatchEventId": "string",
      "CloudWatchEventSource": "string",
      "CodeDeployApplication": "string",
      "CodeDeployDeploymentGroup": "string",
      "CodeDeployDeploymentId": "string",
      "CodeDeployInstanceGroupId": "string",
      "CodeDeployState": "string",
      "EbsCause": "string",
      "EbsEvent": "string",
      "EbsRequestId": "string",
      "EbsResult": "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",
            "RdsEventCategories": "string",
            "RdsEventMessage": "string",
            "S3EventName": "string",
            "SourceARN": "string",
            "SourceType": "string",
            "StartTime": number,
            "StatesArn": "string",
            "StatesExecutionArn": "string",
            "StatesInput": "string",
            "StatesStatus": "string",
            "Unit": "string",
            "Value": number,
            "XRayErrorPercent": number,
            "XRayFaultPercent": number,
            "XRayNodeName": "string",
            "XRayNodeType": "string",
            "XRayRequestAverageLatency": number,
            "XRayRequestCount": number,
            "XRayThrottlePercent": 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.

Observation (p. 31)

Information about the observation.

Type: Observation (p. 82) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 95).

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 V2](#)
- [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

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

Request Parameters

For information about the parameters that are common to all actions, see Common
Parameters (p. 93).

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

```
{
    "Problem": {
        "AffectedResource": "string",
        "EndTime": number,
        "Feedback": {
            "string" : "string"
        },
        "Id": "string",
        "Insights": "string",
        "LastRecurrenceTime": number,
        "RecurringCount": number,
        "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. 34)

Information about the problem.

Type: Problem (p. 88) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 95).

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 V2
- 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. 93).

The request accepts the following data in JSON format.

ProblemId (p. 36)

> 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",
                "CloudWatchEventSource": "string",
                "CodeDeployApplication": "string",
                "CodeDeployDeploymentGroup": "string",
                "CodeDeployDeploymentId": "string",
                "CodeDeployInstanceGroupId": "string",
                "CodeDeployState": "string",
                "EbsCause": "string",
                "EbsEvent": "string",
                "EbsRequestId": "string",
                "EbsResult": "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",
                "RdsEventCategories": "string",
                "RdsEventMessage": "string",
                "S3EventName": "string",
                "SourceARN": "string",
                "SourceType": "string",
                "StartTime": number,
                "StatesArn": "string",
                "StatesExecutionArn": "string",
                "StatesInput": "string",
                "StatesStatus": "string",
                "Unit": "string",
                "Value": number,
                "XRayErrorPercent": number,
                "XRayFaultPercent": number,
                "XRayNodeName": "string",
                "XRayNodeType": "string",
                "XRayRequestAverageLatency": number,
                "XRayRequestCount": number,
                "XRayThrottlePercent": 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.

RelatedObservations (p. 36)

Observations related to the problem.

Type: RelatedObservations (p. 91) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 95).

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 V2
- 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. 93).

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

Valid Range: Minimum value of 1. Maximum value of 40.

Required: No

NextToken (p. 39)

The token to request the next page of results.

Type: String

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

Pattern: `.+`

Required: No

Response Syntax

```
{
    "ApplicationInfoList": [
        {
            "AutoConfigEnabled": boolean,
            "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. 39)

>   The list of applications.

>   Type: Array of ApplicationInfo (p. 76) objects

NextToken (p. 39)

>   The token 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 1024.

>   Pattern: `.+`

Errors

For information about the errors that are common to all actions, see Common Errors (p. 95).

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 V2
- 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

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 93).

The request accepts the following data in JSON format.

MaxResults (p. 41)

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

Valid Range: Minimum value of 1. Maximum value of 40.

Required: No

NextToken (p. 41)

The token to request the next page of results.

Type: String

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

Pattern: `.+`

Required: No

ResourceGroupName (p. 41)

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

```
{
```

```
    "ApplicationComponentList": [
        {
            "ComponentName": "string",
            "ComponentRemarks": "string",
            "DetectedWorkload": {
                "string" : {
                    "string" : "string"
                }
            },
            "Monitor": boolean,
            "OsType": "string",
            "ResourceType": "string",
            "Tier": "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.

ApplicationComponentList (p. 41)

 The list of application components.

 Type: Array of ApplicationComponent (p. 74) objects

NextToken (p. 41)

 The token to request the next page of results.

 Type: String

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

 Pattern: .+

Errors

For information about the errors that are common to all actions, see Common Errors (p. 95).

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

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. 93).

The request accepts the following data in JSON format.

EndTime (p. 44)

    The end time of the event.

    Type: Timestamp

    Required: No

EventStatus (p. 44)

    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. 44)

    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

    Valid Range: Minimum value of 1. Maximum value of 40.

    Required: No

NextToken (p. 44)

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

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

Pattern: `.+`

Required: No

ResourceGroupName (p. 44)

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. 44)

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. 45)

The list of configuration events and their corresponding details.

Type: Array of ConfigurationEvent (p. 78) objects

NextToken (p. 45)

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

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

Pattern: `.+`

Errors

For information about the errors that are common to all actions, see Common Errors (p. 95).

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 V2
- 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

```
{
    "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. 93).

The request accepts the following data in JSON format.

MaxResults (p. 47)

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

Valid Range: Minimum value of 1. Maximum value of 40.

Required: No

NextToken (p. 47)

The token to request the next page of results.

Type: String

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

Pattern: `.+`

Required: No

PatternSetName (p. 47)

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: No

ResourceGroupName (p. 47)

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

```
{
   "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. 48)

The list of log patterns.

Type: Array of LogPattern (p. 80) objects

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

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

Pattern: `.+`

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. 95).

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 V2
- 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

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 93).

The request accepts the following data in JSON format.

MaxResults (p. 50)

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

Valid Range: Minimum value of 1. Maximum value of 40.

Required: No

NextToken (p. 50)

The token to request the next page of results.

Type: String

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

Pattern: `.+`

Required: No

ResourceGroupName (p. 50)

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

```
{
```

```
    "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. 50)

>   The list of log pattern sets.
>
>   Type: Array of strings
>
>   Length Constraints: Minimum length of 1. Maximum length of 30.
>
>   Pattern: `[a-zA-Z0-9\.\-_]*`

NextToken (p. 50)

>   The token 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 1024.
>
>   Pattern: `.+`

ResourceGroupName (p. 50)

>   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. 95).

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 V2
- 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

```
{
    "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. 93).

The request accepts the following data in JSON format.

EndTime (p. 53)

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. 53)

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

Valid Range: Minimum value of 1. Maximum value of 40.

Required: No

NextToken (p. 53)

The token to request the next page of results.

Type: String

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

Pattern: `.+`

Required: No

ResourceGroupName (p. 53)

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

StartTime (p. 53)

The time when the problem was detected, in epoch seconds. If you don't specify a time frame for the request, problems within the past seven days are returned.

Type: Timestamp

Required: No

Response Syntax

```
{
    "NextToken": "string",
    "ProblemList": [
        {
            "AffectedResource": "string",
            "EndTime": number,
            "Feedback": {
                "string" : "string"
            },
            "Id": "string",
            "Insights": "string",
            "LastRecurrenceTime": number,
            "RecurringCount": number,
            "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. 54)

The token 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 1024.

Pattern: `.+`

ProblemList (p. 54)

The list of problems.

Type: Array of Problem (p. 88) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 95).

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 V2
- 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

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 93).

The request accepts the following data in JSON format.

ResourceARN (p. 56)

> 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.
>
> Pattern: ^arn:aws(-\w+)*:[\w\d-]+:([\w\d-]*)?:[\w\d_-]*([:/].+)*$
>
> Required: Yes

Response Syntax

```
{
    "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. 56)

> 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. 92) 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. 95).

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 V2
- 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

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 93).

The request accepts the following data in JSON format.

ResourceARN (p. 58)

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.

Pattern: `^arn:aws(-\w+)*:[\w\d-]+:([\w\d-]*)?:[\w\d_-]*([:/].+)*$`

Required: Yes

Tags (p. 58)

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. 92) 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. 95).

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 V2
- 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

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 93).

The request accepts the following data in JSON format.

ResourceARN (p. 60)

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.

Pattern: `^arn:aws(-\w+)*:[\w\d-]+:([\w\d-]*)?:[\w\d_-]*([:/].+)*$`

Required: Yes

TagKeys (p. 60)

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.

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

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

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. 95).

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

UpdateApplication

Updates the application.

Request Syntax

```
{
    "AutoConfigEnabled": boolean,
    "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. 93).

The request accepts the following data in JSON format.

AutoConfigEnabled (p. 62)

Turns auto-configuration on or off.

Type: Boolean

Required: No

CWEMonitorEnabled (p. 62)

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. 62)

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

Type: Boolean

Required: No

OpsItemSNSTopicArn (p. 62)

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

Length Constraints: Minimum length of 20. Maximum length of 300.

Pattern: `^arn:aws(-\w+)*:[\w\d-]+:([\w\d-]*)?:[\w\d_-]*([:/].+)*$`

Required: No

RemoveSNSTopic (p. 62)

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

Type: Boolean

Required: No

ResourceGroupName (p. 62)

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": {
      "AutoConfigEnabled": boolean,
      "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. 63)

Information about the application.

Type: ApplicationInfo (p. 76) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 95).

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 V2
- 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

```
{
    "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. 93).

The request accepts the following data in JSON format.

ComponentName (p. 65)

The name of the component.

Type: String

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

Pattern: `^[\d\w\-_\.+]*$`

Required: Yes

NewComponentName (p. 65)

The new name of the component.

Type: String

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

Pattern: `^[\d\w\-_\.+]*$`

Required: No

ResourceGroupName (p. 65)

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. 65)

The list of resource ARNs that belong to the component.

Type: Array of strings

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

Pattern: `^arn:aws(-\w+)*:[\w\d-]+:([\w\d-]*)?:[\w\d_-]*([:/].+)*$`

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. 95).

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 V2
- 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

```
{
    "AutoConfigEnabled": boolean,
    "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. 93).

The request accepts the following data in JSON format.

AutoConfigEnabled (p. 67)

Automatically configures the component by applying the recommended configurations.

Type: Boolean

Required: No

ComponentConfiguration (p. 67)

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.

Pattern: `[\S\s]+`

Required: No

ComponentName (p. 67)

The name of the component.

Type: String

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

Pattern: `(?:^[\d\w\-_\.+]*$)|(?:^arn:aws(-\w+)*:[\w\d-]+:([\w\d-]*)?:[\w\d_-]*([:/].+)*$)`

Required: Yes

Monitor (p. 67)

Indicates whether the application component is monitored.

Type: Boolean

Required: No

ResourceGroupName (p. 67)

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. 67)

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

Type: String

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

Valid Values: `CUSTOM | DEFAULT | DOT_NET_CORE | DOT_NET_WORKER | DOT_NET_WEB_TIER | DOT_NET_WEB | SQL_SERVER | SQL_SERVER_ALWAYSON_AVAILABILITY_GROUP | MYSQL | POSTGRESQL | JAVA_JMX | ORACLE`

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. 95).

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 V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- 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. 93).

The request accepts the following data in JSON format.

Pattern (p. 70)

The log pattern. The pattern must be DFA compatible. Patterns that utilize forward lookahead or backreference constructions are not supported.

Type: String

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

Pattern: `[\S\s]+`

Required: No

PatternName (p. 70)

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. 70)

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

Rank (p. 70)

Rank of the log pattern. Must be a value between `1` and `1,000,000`. The patterns are sorted by rank, so we recommend that you set your highest priority patterns with the lowest rank. A pattern

of rank `1` will be the first to get matched to a log line. A pattern of rank `1,000,000` will be last to get matched. When you configure custom log patterns from the console, a `Low` severity pattern translates to a `750,000` rank. A `Medium` severity pattern translates to a `500,000` rank. And a `High` severity pattern translates to a `250,000` rank. Rank values less than `1` or greater than `1,000,000` are reserved for AWS-provided patterns.

Type: Integer

Required: No

ResourceGroupName (p. 70)

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. 71)

The successfully created log pattern.

Type: LogPattern (p. 80) object

ResourceGroupName (p. 71)

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. 95).

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 V2
- 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

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

Contents

ComponentName

The name of the component.

Type: String

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

Pattern: `(?:^[\d\w\-_\.+]*$)|(?:^arn:aws(-\w+)*:[\w\d-]+:([\w\d-]*)?:[\w\d_-]*([:/].+)*$)`

Required: No

ComponentRemarks

If logging is supported for the resource type, indicates whether the component has configured logs to be monitored.

Type: String

Required: No

DetectedWorkload

Workloads detected in the application component.

Type: String to string to string map map

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

Valid Keys: `CUSTOM | DEFAULT | DOT_NET_CORE | DOT_NET_WORKER | DOT_NET_WEB_TIER | DOT_NET_WEB | SQL_SERVER | SQL_SERVER_ALWAYSON_AVAILABILITY_GROUP | MYSQL | POSTGRESQL | JAVA_JMX | ORACLE`

Required: No

Monitor

Indicates whether the application component is monitored.

Type: Boolean

Required: No

OsType

The operating system of the component.

Type: String

Valid Values: `WINDOWS | LINUX`

Required: No

ResourceType

The resource type. Supported resource types include EC2 instances, Auto Scaling group, Classic ELB, Application ELB, and SQS Queue.

Type: String

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

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

Required: No

Tier

The stack tier of the application component.

Type: String

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

Valid Values: `CUSTOM | DEFAULT | DOT_NET_CORE | DOT_NET_WORKER`
`| DOT_NET_WEB_TIER | DOT_NET_WEB | SQL_SERVER |`
`SQL_SERVER_ALWAYSON_AVAILABILITY_GROUP | MYSQL | POSTGRESQL | JAVA_JMX |`
`ORACLE`

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

ApplicationInfo

Describes the status of the application.

Contents

AutoConfigEnabled

Indicates whether auto-configuration is turned on for this application.

Type: Boolean

Required: No

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

Length Constraints: Minimum length of 20. Maximum length of 300.

Pattern: `^arn:aws(-\w+)*:[\w\d-]+:([\w\d-]*)?:[\w\d_-]*([:/].+)*$`

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 V2
- 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` | `CLOUDWATCH_LOG` | `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:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- 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 as many as 50 characters, and it cannot be empty. The pattern must be DFA compatible. Patterns that utilize forward lookahead or backreference constructions are not supported.

Type: String

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

Pattern: `[\S\s]+`

Required: No

PatternName

The name of the log pattern. A log pattern name can contain as many as 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

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

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

Required: No

PatternSetName

The name of the log pattern. A log pattern name can contain as many as 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

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

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

Required: No

Rank

Rank of the log pattern. Must be a value between `1` and `1,000,000`. The patterns are sorted by rank, so we recommend that you set your highest priority patterns with the lowest rank. A pattern of rank `1` will be the first to get matched to a log line. A pattern of rank `1,000,000` will be last to get matched. When you configure custom log patterns from the console, a `Low` severity pattern translates to a `750,000` rank. A `Medium` severity pattern translates to a `500,000` rank. And a `High` severity pattern translates to a `250,000` rank. Rank values less than `1` or greater than `1,000,000` are reserved for AWS-provided patterns.

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

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 | RDS`

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

EbsCause

The cause of an EBS CloudWatch event.

Type: String

Required: No

EbsEvent

The type of EBS CloudWatch event, such as `createVolume`, `deleteVolume` or `attachVolume`.

Type: String

Required: No

EbsRequestId

The request ID of an EBS CloudWatch event.

Type: String

Required: No

EbsResult

The result of an EBS CloudWatch event, such as `failed` or `succeeded`.

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]{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

RdsEventCategories

The category of an RDS event.

Type: String

Required: No

RdsEventMessage

The message of an RDS event.

Type: String

Required: No

S3EventName

The name of the S3 CloudWatch Event-based observation.

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

StatesArn

The Amazon Resource Name (ARN) of the step function-based observation.

Type: String

Required: No

StatesExecutionArn

The Amazon Resource Name (ARN) of the step function execution-based observation.

Type: String

Required: No

StatesInput

The input to the step function-based observation.

Type: String

Required: No

StatesStatus

The status of the step function-related observation.

Type: String

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.

Type: Long

Required: No

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 V2
- 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

Map Entries: Maximum number of 10 items.

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

LastRecurrenceTime

The last time that the problem reoccurred after its last resolution.

Type: Timestamp

Required: No

RecurringCount

The number of times that the same problem reoccurred after the first time it was resolved.

Type: Long

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 | RECURRING`

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 V2

- [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. 82) 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 V2
- 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

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

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

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.

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

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'T'HHMMSS'Z'). For example, the following date time is a valid X-Amz-Date value: `20120325T120000Z`.

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

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

Type: string

Required: Conditional

X-Amz-Security-Token

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

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

Type: string

Required: Conditional

X-Amz-Signature

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

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

Type: string

Required: Conditional

X-Amz-SignedHeaders

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

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

Type: string

Required: Conditional

Common Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 400

IncompleteSignature

The request signature does not conform to AWS standards.

HTTP Status Code: 400

InternalFailure

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

HTTP Status Code: 500

InvalidAction

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

HTTP Status Code: 400

InvalidClientTokenId

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

HTTP Status Code: 403

InvalidParameterCombination

Parameters that must not be used together were used together.

HTTP Status Code: 400

InvalidParameterValue

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

HTTP Status Code: 400

InvalidQueryParameter

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

HTTP Status Code: 400

MalformedQueryString

The query string contains a syntax error.

HTTP Status Code: 404

MissingAction

The request is missing an action or a required parameter.

HTTP Status Code: 400

MissingAuthenticationToken

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

HTTP Status Code: 403

MissingParameter

A required parameter for the specified action is not supplied.

HTTP Status Code: 400

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