Amazon Simple Notification Service

API Version 2010-03-31

Amazon Simple Notification Service: API Reference

Table of Contents

Welcome to the Amazon SNS API Reference

Amazon SNS is a web service that enables you to build distributed web-enabled applications. Applications can use Amazon SNS to easily push real-time notification messages to interested subscribers over multiple delivery protocols. For more information about this product see the Amazon SNS product page. For detailed information about Amazon SNS features and their associated API calls, see the Amazon SNS Developer Guide.

For information on the permissions you need to use this API, see Identity and access management in Amazon SNS in the *Amazon SNS Developer Guide.*

We also provide SDKs that enable you to access Amazon SNS from your preferred programming language. The SDKs contain functionality that automatically takes care of tasks such as: cryptographically signing your service requests, retrying requests, and handling error responses. For a list of available SDKs, go to Tools for Amazon Web Services.

Actions

The following actions are supported:

- AddPermission
- CheckIfPhoneNumberIsOptedOut
- ConfirmSubscription
- CreatePlatformApplication
- CreatePlatformEndpoint
- CreateSMSSandboxPhoneNumber
- CreateTopic
- DeleteEndpoint
- DeletePlatformApplication
- DeleteSMSSandboxPhoneNumber
- DeleteTopic
- GetDataProtectionPolicy
- GetEndpointAttributes
- GetPlatformApplicationAttributes
- GetSMSAttributes
- GetSMSSandboxAccountStatus
- GetSubscriptionAttributes
- GetTopicAttributes
- ListEndpointsByPlatformApplication
- ListOriginationNumbers
- ListPhoneNumbersOptedOut
- ListPlatformApplications
- ListSMSSandboxPhoneNumbers
- ListSubscriptions
- ListSubscriptionsByTopic
- ListTagsForResource
- ListTopics

AddPermission

Adds a statement to a topic's access control policy, granting access for the specified AWS accounts to the specified actions.

> **ⓘ Note**
>
> To remove the ability to change topic permissions, you must deny permissions to the `AddPermission`, `RemovePermission`, and `SetTopicAttributes` actions in your IAM policy.

Request Parameters

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

ActionName.member.N

The action you want to allow for the specified principal(s).

Valid values: Any Amazon SNS action name, for example `Publish`.

Type: Array of strings

Required: Yes

AWSAccountId.member.N

The AWS account IDs of the users (principals) who will be given access to the specified actions. The users must have AWS account, but do not need to be signed up for this service.

Type: Array of strings

Required: Yes

Label

A unique identifier for the new policy statement.

Type: String

Required: Yes

TopicArn

The ARN of the topic whose access control policy you wish to modify.

Type: String

Required: Yes

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

NotFound

Indicates that the requested resource does not exist.

HTTP Status Code: 404

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see [Examples of the complete Signature Version 4 signing process (Python)](#) in the *AWS General Reference*.

Example

This example illustrates one usage of AddPermission.

Sample Request

```
https://sns.us-east-2.amazonaws.com/?Action=AddPermission
&TopicArn=arn%3Aaws%3Asns%3Aus-east-2%3A123456789012%3AMy-Test
&Label=NewPermission
&ActionName.member.1=Publish
&ActionName.member.2=GetTopicAttributes
&AWSAccountId.member.1=987654321000
&AWSAccountId.member.2=876543210000
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<AddPermissionResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <ResponseMetadata>
        <RequestId>6a213e4e-33a8-11df-9540-99d0768312d3</RequestId>
    </ResponseMetadata>
</AddPermissionResponse>
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python

- [AWS SDK for Ruby V3](#)

CheckIfPhoneNumberIsOptedOut

Accepts a phone number and indicates whether the phone holder has opted out of receiving SMS messages from your AWS account. You cannot send SMS messages to a number that is opted out.

To resume sending messages, you can opt in the number by using the `OptInPhoneNumber` action.

Request Parameters

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

phoneNumber

> The phone number for which you want to check the opt out status.
>
> Type: String
>
> Required: Yes

Response Elements

The following element is returned by the service.

isOptedOut

> Indicates whether the phone number is opted out:
> - `true` – The phone number is opted out, meaning you cannot publish SMS messages to it.
> - `false` – The phone number is opted in, meaning you can publish SMS messages to it.
>
> Type: Boolean

Errors

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

AuthorizationError

> Indicates that the user has been denied access to the requested resource.
>
> HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

Throttled

Indicates that the rate at which requests have been submitted for this action exceeds the limit for your Amazon Web Services account.

message

Throttled request.

HTTP Status Code: 429

See Also

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

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ConfirmSubscription

Verifies an endpoint owner's intent to receive messages by validating the token sent to the endpoint by an earlier `Subscribe` action. If the token is valid, the action creates a new subscription and returns its Amazon Resource Name (ARN). This call requires an AWS signature only when the `AuthenticateOnUnsubscribe` flag is set to "true".

Request Parameters

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

AuthenticateOnUnsubscribe

Disallows unauthenticated unsubscribes of the subscription. If the value of this parameter is `true` and the request has an AWS signature, then only the topic owner and the subscription owner can unsubscribe the endpoint. The unsubscribe action requires AWS authentication.

Type: String

Required: No

Token

Short-lived token sent to an endpoint during the `Subscribe` action.

Type: String

Required: Yes

TopicArn

The ARN of the topic for which you wish to confirm a subscription.

Type: String

Required: Yes

Response Elements

The following element is returned by the service.

SubscriptionArn

The ARN of the created subscription.

Type: String

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

FilterPolicyLimitExceeded

Indicates that the number of filter polices in your AWS account exceeds the limit. To add more filter polices, submit an Amazon SNS Limit Increase case in the AWS Support Center.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

NotFound

Indicates that the requested resource does not exist.

HTTP Status Code: 404

ReplayLimitExceeded

Indicates that the request parameter has exceeded the maximum number of concurrent message replays.

HTTP Status Code: 403

SubscriptionLimitExceeded

Indicates that the customer already owns the maximum allowed number of subscriptions.

HTTP Status Code: 403

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see Examples of the complete Signature Version 4 signing process (Python) in the *AWS General Reference*.

Example

This example illustrates one usage of ConfirmSubscription.

Sample Request

```
https://sns.us-east-2.amazonaws.com/?Action=ConfirmSubscription
&TopicArn=arn%3aws%3sns%3us-east-2%3123456789012%3My-Topic
&Token=51b2ff3edb475b7d91550e0ab6edf0c1de2a34e6ebaf6c2262a001bcb7e051c43aa00022ceecce70bd2a67b2
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<ConfirmSubscriptionResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <ConfirmSubscriptionResult>
        <SubscriptionArn>arn:aws:sns:us-east-2:123456789012:My-
Topic:80289ba6-0fd4-4079-afb4-ce8c8260f0ca</SubscriptionArn>
    </ConfirmSubscriptionResult>
    <ResponseMetadata>
        <RequestId>7a50221f-3774-11df-a9b7-05d48da6f042</RequestId>
    </ResponseMetadata>
</ConfirmSubscriptionResponse>
```

See Also

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

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

CreatePlatformApplication

Creates a platform application object for one of the supported push notification services, such as APNS and GCM (Firebase Cloud Messaging), to which devices and mobile apps may register. You must specify `PlatformPrincipal` and `PlatformCredential` attributes when using the `CreatePlatformApplication` action.

`PlatformPrincipal` and `PlatformCredential` are received from the notification service.

- For ADM, `PlatformPrincipal` is `client id` and `PlatformCredential` is `client secret`.
- For APNS and APNS_SANDBOX using certificate credentials, `PlatformPrincipal` is `SSL certificate` and `PlatformCredential` is `private key`.
- For APNS and APNS_SANDBOX using token credentials, `PlatformPrincipal` is `signing key ID` and `PlatformCredential` is `signing key`.
- For Baidu, `PlatformPrincipal` is `API key` and `PlatformCredential` is `secret key`.
- For GCM (Firebase Cloud Messaging) using key credentials, there is no `PlatformPrincipal`. The `PlatformCredential` is `API key`.
- For GCM (Firebase Cloud Messaging) using token credentials, there is no `PlatformPrincipal`. The `PlatformCredential` is a JSON formatted private key file. When using the AWS CLI or AWS SDKs, the file must be in string format and special characters must be ignored. To format the file correctly, Amazon SNS recommends using the following command: SERVICE_JSON= $(jq @json < service.json).
- For MPNS, `PlatformPrincipal` is `TLS certificate` and `PlatformCredential` is `private key`.
- For WNS, `PlatformPrincipal` is `Package Security Identifier` and `PlatformCredential` is `secret key`.

You can use the returned `PlatformApplicationArn` as an attribute for the `CreatePlatformEndpoint` action.

Request Parameters

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

Attributes , Attributes.entry.N.key (key), Attributes.entry.N.value (value)

For a list of attributes, see SetPlatformApplicationAttributes.

Type: String to string map

Required: Yes

Name

Application names must be made up of only uppercase and lowercase ASCII letters, numbers, underscores, hyphens, and periods, and must be between 1 and 256 characters long.

Type: String

Required: Yes

Platform

The following platforms are supported: ADM (Amazon Device Messaging), APNS (Apple Push Notification Service), APNS_SANDBOX, and GCM (Firebase Cloud Messaging).

Type: String

Required: Yes

Response Elements

The following element is returned by the service.

PlatformApplicationArn

`PlatformApplicationArn` is returned.

Type: String

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see Examples of the complete Signature Version 4 signing process (Python) in the *AWS General Reference*.

Example

This example illustrates one usage of CreatePlatformApplication.

Sample Request

```
https://sns.us-west-2.amazonaws.com/?Action=CreatePlatformApplication
&Name=gcmpushapp
&Platform=GCM
&Attributes.entry.1.key=PlatformCredential
&Attributes.entry.1.value=AIzaSyClE2lcV2zEKTLYYo645zfk2jhQPFeyxDo
&Attributes.entry.2.key=PlatformPrincipal
&Attributes.entry.2.value=There+is+no+principal+for+GCM
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<CreatePlatformApplicationResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <CreatePlatformApplicationResult>
        <PlatformApplicationArn>arn:aws:sns:us-west-2:123456789012:app/GCM/gcmpushapp</
PlatformApplicationArn>
    </CreatePlatformApplicationResult>
    <ResponseMetadata>
```

```
        <RequestId>b6f0e78b-e9d4-5a0e-b973-adc04e8a4ff9</RequestId>
    </ResponseMetadata>
</CreatePlatformApplicationResponse>
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

CreatePlatformEndpoint

Creates an endpoint for a device and mobile app on one of the supported push notification services, such as GCM (Firebase Cloud Messaging) and APNS. `CreatePlatformEndpoint` requires the `PlatformApplicationArn` that is returned from `CreatePlatformApplication`. You can use the returned `EndpointArn` to send a message to a mobile app or by the `Subscribe` action for subscription to a topic. The `CreatePlatformEndpoint` action is idempotent, so if the requester already owns an endpoint with the same device token and attributes, that endpoint's ARN is returned without creating a new endpoint. For more information, see [Using Amazon SNS Mobile Push Notifications](#).

When using `CreatePlatformEndpoint` with Baidu, two attributes must be provided: ChannelId and UserId. The token field must also contain the ChannelId. For more information, see [Creating an Amazon SNS Endpoint for Baidu](#).

Request Parameters

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

Attributes , Attributes.entry.N.key (key), Attributes.entry.N.value (value)

For a list of attributes, see [SetEndpointAttributes](#).

Type: String to string map

Required: No

CustomUserData

Arbitrary user data to associate with the endpoint. Amazon SNS does not use this data. The data must be in UTF-8 format and less than 2KB.

Type: String

Required: No

PlatformApplicationArn

`PlatformApplicationArn` returned from CreatePlatformApplication is used to create a an endpoint.

Type: String

Required: Yes

Token

Unique identifier created by the notification service for an app on a device. The specific name for Token will vary, depending on which notification service is being used. For example, when using APNS as the notification service, you need the device token. Alternatively, when using GCM (Firebase Cloud Messaging) or ADM, the device token equivalent is called the registration ID.

Type: String

Required: Yes

Response Elements

The following element is returned by the service.

EndpointArn

EndpointArn returned from CreateEndpoint action.

Type: String

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

NotFound

Indicates that the requested resource does not exist.

HTTP Status Code: 404

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see [Examples of the complete Signature Version 4 signing process (Python)](#) in the *AWS General Reference*.

Example

This example illustrates one usage of CreatePlatformEndpoint.

Sample Request

```
https://sns.us-west-2.amazonaws.com/?Action=CreatePlatformEndpoint
&PlatformApplicationArn=arn%3Aaws%3Asns%3Aus-west-2%3A123456789012%3Aapp%2FGCM
%2Fgcmpushapp
&Token=APA91bGi7fFachkC1xjlqT66VYEucGHochmf1VQAr9k...jsM0PKPxKhddCzx6paEsyay9Zn3D4wNUJb8m6HZrBE
&CustomUserData=UserId%3D27576823
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<CreatePlatformEndpointResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <CreatePlatformEndpointResult>
        <EndpointArn>arn:aws:sns:us-west-2:123456789012:endpoint/GCM/
gcmpushapp/5e3e9847-3183-3f18-a7e8-671c3a57d4b3</EndpointArn>
    </CreatePlatformEndpointResult>
    <ResponseMetadata>
        <RequestId>6613341d-3e15-53f7-bf3c-7e56994ba278</RequestId>
    </ResponseMetadata>
```

```
</CreatePlatformEndpointResponse>
```

See Also

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

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

CreateSMSSandboxPhoneNumber

Adds a destination phone number to an AWS account in the SMS sandbox and sends a one-time password (OTP) to that phone number.

When you start using Amazon SNS to send SMS messages, your AWS account is in the *SMS sandbox*. The SMS sandbox provides a safe environment for you to try Amazon SNS features without risking your reputation as an SMS sender. While your AWS account is in the SMS sandbox, you can use all of the features of Amazon SNS. However, you can send SMS messages only to verified destination phone numbers. For more information, including how to move out of the sandbox to send messages without restrictions, see SMS sandbox in the *Amazon SNS Developer Guide*.

Request Parameters

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

LanguageCode

The language to use for sending the OTP. The default value is en-US.

Type: String

Valid Values: en-US | en-GB | es-419 | es-ES | de-DE | fr-CA | fr-FR | it-IT | ja-JP | pt-BR | kr-KR | zh-CN | zh-TW

Required: No

PhoneNumber

The destination phone number to verify. On verification, Amazon SNS adds this phone number to the list of verified phone numbers that you can send SMS messages to.

Type: String

Length Constraints: Maximum length of 20.

Pattern: ^(\+[0-9]{8,}|[0-9]{0,9})$

Required: Yes

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

OptedOut

Indicates that the specified phone number opted out of receiving SMS messages from your AWS account. You can't send SMS messages to phone numbers that opt out.

HTTP Status Code: 400

Throttled

Indicates that the rate at which requests have been submitted for this action exceeds the limit for your Amazon Web Services account.

message

Throttled request.

HTTP Status Code: 429

UserError

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see [Examples of the complete Signature Version 4 signing process (Python)](#) in the *AWS General Reference.*

Example

This example illustrates one usage of CreateSMSSandboxPhoneNumber.

Sample Request

```
https://sns.us-west-2.amazonaws.com/?Action=CreateSMSSandboxPhoneNumber
&PhoneNumber=%2B12065550100
&LanguageCode=en-US
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<CreateSMSSandboxPhoneNumberResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <CreateSMSSandboxPhoneNumberResult>
    </CreateSMSSandboxPhoneNumberResult>
    <ResponseMetadata>
        <RequestId>0d30fe4d-b737-5759-a82a-a6b75f920cdb</RequestId>
    </ResponseMetadata>
</CreateSMSSandboxPhoneNumberResponse>
```

See Also

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

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)

- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

CreateTopic

Creates a topic to which notifications can be published. Users can create at most 100,000 standard topics (at most 1,000 FIFO topics). For more information, see [Creating an Amazon SNS topic](#) in the *Amazon SNS Developer Guide*. This action is idempotent, so if the requester already owns a topic with the specified name, that topic's ARN is returned without creating a new topic.

Request Parameters

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

Attributes , Attributes.entry.N.key (key), Attributes.entry.N.value (value)

A map of attributes with their corresponding values.

The following lists names, descriptions, and values of the special request parameters that the `CreateTopic` action uses:

- `DeliveryPolicy` – The policy that defines how Amazon SNS retries failed deliveries to HTTP/S endpoints.

- `DisplayName` – The display name to use for a topic with SMS subscriptions.

- `Policy` – The policy that defines who can access your topic. By default, only the topic owner can publish or subscribe to the topic.

- `TracingConfig` – Tracing mode of an Amazon SNS topic. By default `TracingConfig` is set to `PassThrough`, and the topic passes through the tracing header it receives from an Amazon SNS publisher to its subscriptions. If set to `Active`, Amazon SNS will vend X-Ray segment data to topic owner account if the sampled flag in the tracing header is true. This is only supported on standard topics.

- HTTP

  - `HTTPSuccessFeedbackRoleArn` – Indicates successful message delivery status for an Amazon SNS topic that is subscribed to an HTTP endpoint.

  - `HTTPSuccessFeedbackSampleRate` – Indicates percentage of successful messages to sample for an Amazon SNS topic that is subscribed to an HTTP endpoint.

  - `HTTPFailureFeedbackRoleArn` – Indicates failed message delivery status for an Amazon SNS topic that is subscribed to an HTTP endpoint.

- Amazon Data Firehose

- `FirehoseSuccessFeedbackRoleArn` – Indicates successful message delivery status for an Amazon SNS topic that is subscribed to an Amazon Data Firehose endpoint.

- `FirehoseSuccessFeedbackSampleRate` – Indicates percentage of successful messages to sample for an Amazon SNS topic that is subscribed to an Amazon Data Firehose endpoint.

- `FirehoseFailureFeedbackRoleArn` – Indicates failed message delivery status for an Amazon SNS topic that is subscribed to an Amazon Data Firehose endpoint.

- AWS Lambda

  - `LambdaSuccessFeedbackRoleArn` – Indicates successful message delivery status for an Amazon SNS topic that is subscribed to an AWS Lambda endpoint.

  - `LambdaSuccessFeedbackSampleRate` – Indicates percentage of successful messages to sample for an Amazon SNS topic that is subscribed to an AWS Lambda endpoint.

  - `LambdaFailureFeedbackRoleArn` – Indicates failed message delivery status for an Amazon SNS topic that is subscribed to an AWS Lambda endpoint.

- Platform application endpoint

  - `ApplicationSuccessFeedbackRoleArn` – Indicates successful message delivery status for an Amazon SNS topic that is subscribed to a platform application endpoint.

  - `ApplicationSuccessFeedbackSampleRate` – Indicates percentage of successful messages to sample for an Amazon SNS topic that is subscribed to an platform application endpoint.

  - `ApplicationFailureFeedbackRoleArn` – Indicates failed message delivery status for an Amazon SNS topic that is subscribed to an platform application endpoint.

> ⓘ **Note**
>
> In addition to being able to configure topic attributes for message delivery status of notification messages sent to Amazon SNS application endpoints, you can also configure application attributes for the delivery status of push notification messages sent to push notification services.
>
> For example, For more information, see Using Amazon SNS Application Attributes for Message Delivery Status.

- Amazon SQS

- `SQSSuccessFeedbackRoleArn` – Indicates successful message delivery status for an Amazon SNS topic that is subscribed to an Amazon SQS endpoint.

- `SQSSuccessFeedbackSampleRate` – Indicates percentage of successful messages to sample for an Amazon SNS topic that is subscribed to an Amazon SQS endpoint.

- `SQSFailureFeedbackRoleArn` – Indicates failed message delivery status for an Amazon SNS topic that is subscribed to an Amazon SQS endpoint.

> **ⓘ Note**
>
> The <ENDPOINT>SuccessFeedbackRoleArn and <ENDPOINT>FailureFeedbackRoleArn attributes are used to give Amazon SNS write access to use CloudWatch Logs on your behalf. The <ENDPOINT>SuccessFeedbackSampleRate attribute is for specifying the sample rate percentage (0-100) of successfully delivered messages. After you configure the <ENDPOINT>FailureFeedbackRoleArn attribute, then all failed message deliveries generate CloudWatch Logs.

The following attribute applies only to [server-side encryption](#):

- `KmsMasterKeyId` – The ID of an AWS managed customer master key (CMK) for Amazon SNS or a custom CMK. For more information, see [Key Terms](#). For more examples, see [KeyId](#) in the *AWS Key Management Service API Reference.*

The following attributes apply only to [FIFO topics](#):

- `ArchivePolicy` – The policy that sets the retention period for messages stored in the message archive of an Amazon SNS FIFO topic.

- `ContentBasedDeduplication` – Enables content-based deduplication for FIFO topics.

  - By default, `ContentBasedDeduplication` is set to `false`. If you create a FIFO topic and this attribute is `false`, you must specify a value for the `MessageDeduplicationId` parameter for the [Publish](#) action.

  - When you set `ContentBasedDeduplication` to `true`, Amazon SNS uses a SHA-256 hash to generate the `MessageDeduplicationId` using the body of the message (but not the attributes of the message).

    (Optional) To override the generated value, you can specify a value for the `MessageDeduplicationId` parameter for the `Publish` action.

- `FifoThroughputScope` – Enables higher throughput for your FIFO topic by adjusting the scope of deduplication. This attribute has two possible values:

  - `Topic` – The scope of message deduplication is across the entire topic. This is the default value and maintains existing behavior, with a maximum throughput of 3000 messages per second or 20MB per second, whichever comes first.

  - `MessageGroup` – The scope of deduplication is within each individual message group, which enables higher throughput per topic subject to regional quotas. For more information on quotas or to request an increase, see Amazon SNS service quotas in the Amazon Web Services General Reference.

Type: String to string map

Required: No

DataProtectionPolicy

The body of the policy document you want to use for this topic.

You can only add one policy per topic.

The policy must be in JSON string format.

Length Constraints: Maximum length of 30,720.

Type: String

Required: No

Name

The name of the topic you want to create.

Constraints: Topic names must be made up of only uppercase and lowercase ASCII letters, numbers, underscores, and hyphens, and must be between 1 and 256 characters long.

For a FIFO (first-in-first-out) topic, the name must end with the `.fifo` suffix.

Type: String

Required: Yes

Tags.member.N

The list of tags to add to a new topic.

> ⓘ **Note**
>
> To be able to tag a topic on creation, you must have the `sns:CreateTopic` and `sns:TagResource` permissions.

Type: Array of Tag objects

Required: No

Response Elements

The following element is returned by the service.

TopicArn

The Amazon Resource Name (ARN) assigned to the created topic.

Type: String

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

ConcurrentAccess

Can't perform multiple operations on a tag simultaneously. Perform the operations sequentially.

HTTP Status Code: 400

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

InvalidSecurity

The credential signature isn't valid. You must use an HTTPS endpoint and sign your request using Signature Version 4.

HTTP Status Code: 403

StaleTag

A tag has been added to a resource with the same ARN as a deleted resource. Wait a short while and then retry the operation.

HTTP Status Code: 400

TagLimitExceeded

Can't add more than 50 tags to a topic.

HTTP Status Code: 400

TagPolicy

The request doesn't comply with the IAM tag policy. Correct your request and then retry it.

HTTP Status Code: 400

TopicLimitExceeded

Indicates that the customer already owns the maximum allowed number of topics.

HTTP Status Code: 403

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see [Examples of the complete Signature Version 4 signing process (Python)](#) in the *AWS General Reference*.

Example

This example illustrates one usage of CreateTopic.

Sample Request

```
https://sns.us-east-2.amazonaws.com/?Action=CreateTopic
&Name=My-Topic
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<CreateTopicResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <CreateTopicResult>
        <TopicArn>arn:aws:sns:us-east-2:123456789012:My-Topic</TopicArn>
    </CreateTopicResult>
    <ResponseMetadata>
        <RequestId>a8dec8b3-33a4-11df-8963-01868b7c937a</RequestId>
    </ResponseMetadata>
</CreateTopicResponse>
```

See Also

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

- AWS Command Line Interface V2

- AWS SDK for .NET V4

- AWS SDK for C++

- AWS SDK for Go v2

- AWS SDK for Java V2

- AWS SDK for JavaScript V3

- AWS SDK for Kotlin

- AWS SDK for PHP V3

- AWS SDK for Python

- AWS SDK for Ruby V3

DeleteEndpoint

Deletes the endpoint for a device and mobile app from Amazon SNS. This action is idempotent. For more information, see [Using Amazon SNS Mobile Push Notifications](#).

When you delete an endpoint that is also subscribed to a topic, then you must also unsubscribe the endpoint from the topic.

Request Parameters

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

EndpointArn

EndpointArn of endpoint to delete.

Type: String

Required: Yes

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see [Examples of the complete Signature Version 4 signing process (Python)](#) in the *AWS General Reference*.

Example

This example illustrates one usage of DeleteEndpoint.

Sample Request

```
https://sns.us-west-2.amazonaws.com/?Action=DeleteEndpoint
&EndpointArn=arn%3Aaws%3Asns%3Aus-west-2%3A123456789012%3Aendpoint%2FGCM%2Fgcmpushapp
%2F5e3e9847-3183-3f18-a7e8-671c3a57d4b3
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<DeleteEndpointResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <ResponseMetadata>
        <RequestId>c1d2b191-353c-5a5f-8969-fbdd3900afa8</RequestId>
    </ResponseMetadata>
</DeleteEndpointResponse>
```

See Also

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

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)

- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DeletePlatformApplication

Deletes a platform application object for one of the supported push notification services, such as APNS and GCM (Firebase Cloud Messaging). For more information, see Using Amazon SNS Mobile Push Notifications.

Request Parameters

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

PlatformApplicationArn

PlatformApplicationArn of platform application object to delete.

Type: String

Required: Yes

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see [Examples of the complete Signature Version 4 signing process (Python)](#) in the *AWS General Reference*.

Example

This example illustrates one usage of DeletePlatformApplication.

Sample Request

```
https://sns.us-west-2.amazonaws.com/?Action=DeletePlatformApplication
&PlatformApplicationArn=arn%3Aaws%3Asns%3Aus-west-2%3A123456789012%3Aapp%2FGCM
%2Fgcmpushapp
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<DeletePlatformApplicationResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <ResponseMetadata>
        <RequestId>097dac18-7a77-5823-a8dd-e65476dcb037</RequestId>
    </ResponseMetadata>
</DeletePlatformApplicationResponse>
```

See Also

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

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)

- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DeleteSMSSandboxPhoneNumber

Deletes an AWS account's verified or pending phone number from the SMS sandbox.

When you start using Amazon SNS to send SMS messages, your AWS account is in the *SMS sandbox*. The SMS sandbox provides a safe environment for you to try Amazon SNS features without risking your reputation as an SMS sender. While your AWS account is in the SMS sandbox, you can use all of the features of Amazon SNS. However, you can send SMS messages only to verified destination phone numbers. For more information, including how to move out of the sandbox to send messages without restrictions, see SMS sandbox in the *Amazon SNS Developer Guide*.

Request Parameters

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

PhoneNumber

The destination phone number to delete.

Type: String

Length Constraints: Maximum length of 20.

Pattern: ^(\+[0-9]{8,}|[0-9]{0,9})$

Required: Yes

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

ResourceNotFound

Can't perform the action on the specified resource. Make sure that the resource exists.

HTTP Status Code: 404

Throttled

Indicates that the rate at which requests have been submitted for this action exceeds the limit for your Amazon Web Services account.

message

Throttled request.

HTTP Status Code: 429

UserError

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see Examples of the complete Signature Version 4 signing process (Python) in the *AWS General Reference*.

Example

This example illustrates one usage of DeleteSMSSandboxPhoneNumber.

Sample Request

```
https://sns.us-west-2.amazonaws.com/?Action=DeleteSMSSandboxPhoneNumber
&PhoneNumber=%2B12065550100
```

```
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<DeleteSMSSandboxPhoneNumberResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <DeleteSMSSandboxPhoneNumberResult>
    </DeleteSMSSandboxPhoneNumberResult>
    <ResponseMetadata>
        <RequestId>a22418de-4557-52c1-abf8-4024bb19a34a</RequestId>
    </ResponseMetadata>
</DeleteSMSSandboxPhoneNumberResponse>
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

DeleteTopic

Deletes a topic and all its subscriptions. Deleting a topic might prevent some messages previously sent to the topic from being delivered to subscribers. This action is idempotent, so deleting a topic that does not exist does not result in an error.

Request Parameters

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

TopicArn

> The ARN of the topic you want to delete.
>
> Type: String
>
> Required: Yes

Errors

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

AuthorizationError

> Indicates that the user has been denied access to the requested resource.
>
> HTTP Status Code: 403

ConcurrentAccess

> Can't perform multiple operations on a tag simultaneously. Perform the operations sequentially.
>
> HTTP Status Code: 400

InternalError

> Indicates an internal service error.
>
> HTTP Status Code: 500

InvalidParameter

> Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

InvalidState

Indicates that the specified state is not a valid state for an event source.

HTTP Status Code: 400

NotFound

Indicates that the requested resource does not exist.

HTTP Status Code: 404

StaleTag

A tag has been added to a resource with the same ARN as a deleted resource. Wait a short while and then retry the operation.

HTTP Status Code: 400

TagPolicy

The request doesn't comply with the IAM tag policy. Correct your request and then retry it.

HTTP Status Code: 400

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see Examples of the complete Signature Version 4 signing process (Python) in the *AWS General Reference*.

Example

This example illustrates one usage of DeleteTopic.

Sample Request

```
https://sns.us-east-2.amazonaws.com/?Action=DeleteTopic
&TopicArn=arn%3Aaws%3Asns%3Aus-east-2%3A123456789012%3AMy-Topic
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<DeleteTopicResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <ResponseMetadata>
        <RequestId>f3aa9ac9-3c3d-11df-8235-9dab105e9c32</RequestId>
    </ResponseMetadata>
</DeleteTopicResponse>
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

GetDataProtectionPolicy

Retrieves the specified inline `DataProtectionPolicy` document that is stored in the specified Amazon SNS topic.

Request Parameters

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

ResourceArn

The ARN of the topic whose `DataProtectionPolicy` you want to get.

For more information about ARNs, see [Amazon Resource Names (ARNs)](#) in the AWS General Reference.

Type: String

Required: Yes

Response Elements

The following element is returned by the service.

DataProtectionPolicy

Retrieves the `DataProtectionPolicy` in JSON string format.

Type: String

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

InvalidSecurity

The credential signature isn't valid. You must use an HTTPS endpoint and sign your request using Signature Version 4.

HTTP Status Code: 403

NotFound

Indicates that the requested resource does not exist.

HTTP Status Code: 404

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see Examples of the complete Signature Version 4 signing process (Python) in the *AWS General Reference*.

Example

This example illustrates one usage of `GetDataProtectionPolicy`.

Sample Request

```
https://sns.us-east-2.amazonaws.com/?Action=GetDataProtectionPolicy
&ResourceArn=arn%3Aaws%3Asns%3Aus-east-2%3A123456789012%3AMy-Topic
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<GetDataProtectionPolicyResponse xmlns="http://sns.amazonaws.com/doc/2010-03-31/">
    <GetDataProtectionPolicyResult>

 <DataProtectionPolicy>{&quot;Name&quot;:&quot;__default_payload_policy&quot;,&quot;Description
 payload policy&quot;,&quot;Version&quot;:&quot;2021-06-01&quot;,&quot;Statement&quot;:
[{&quot;Sid&quot;:&quot;__deny_statement&quot;,&quot;DataDirection&quot;:&quot;Inbound&quot;,&q
[&quot;*&quot;],&quot;DataIdentifier&quot;:[&quot;arn:aws:dataprotection::aws:data-
identifier/Name&quot;],&quot;Operation&quot;:{&quot;Deny&quot;:{}}}]}</
DataProtectionPolicy>
    </GetDataProtectionPolicyResult>
    <ResponseMetadata>
        <RequestId>71762e21-c4b0-59d8-9bb7-75ac9b77df37</RequestId>
    </ResponseMetadata>
</GetDataProtectionPolicyResponse>
```

See Also

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

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

GetEndpointAttributes

Retrieves the endpoint attributes for a device on one of the supported push notification services, such as GCM (Firebase Cloud Messaging) and APNS. For more information, see Using Amazon SNS Mobile Push Notifications.

Request Parameters

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

EndpointArn

> `EndpointArn` for `GetEndpointAttributes` input.
>
> Type: String
>
> Required: Yes

Response Elements

The following element is returned by the service.

Attributes , Attributes.entry.N.key (key), Attributes.entry.N.value (value)

> Attributes include the following:
>
> - `CustomUserData` – arbitrary user data to associate with the endpoint. Amazon SNS does not use this data. The data must be in UTF-8 format and less than 2KB.
> - `Enabled` – flag that enables/disables delivery to the endpoint. Amazon SNS will set this to false when a notification service indicates to Amazon SNS that the endpoint is invalid. Users can set it back to true, typically after updating Token.
> - `Token` – device token, also referred to as a registration id, for an app and mobile device. This is returned from the notification service when an app and mobile device are registered with the notification service.
>
> > ⓘ **Note**
> >
> > The device token for the iOS platform is returned in lowercase.

Type: String to string map

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

NotFound

Indicates that the requested resource does not exist.

HTTP Status Code: 404

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see [Examples of the complete Signature Version 4 signing process (Python)](#) in the *AWS General Reference*.

Example

This example illustrates one usage of GetEndpointAttributes.

Sample Request

```
https://sns.us-west-2.amazonaws.com/?Action=GetEndpointAttributes
```

```
&EndpointArn=arn%3Aaws%3Asns%3Aus-west-2%3A123456789012%3Aendpoint%2FGCM%2Fgcmpushapp
%2F5e3e9847-3183-3f18-a7e8-671c3a57d4b3
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<GetEndpointAttributesResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <GetEndpointAttributesResult>
        <Attributes>
            <entry>
                <key>Enabled</key>
                <value>true</value>
            </entry>
            <entry>
                <key>CustomUserData</key>
                <value>UserId=01234567</value>
            </entry>
            <entry>
                <key>Token</key>

 <value>APA91bGi7fFachkC1xjlqT66VYEucGHochmf1VQAr9k...jsM0PKPxKhddCzx6paEsyay9Zn3D4wNUJb8m6HZrB</
value>
            </entry>
        </Attributes>
    </GetEndpointAttributesResult>
    <ResponseMetadata>
        <RequestId>6c725a19-a142-5b77-94f9-1055a9ea04e7</RequestId>
    </ResponseMetadata>
</GetEndpointAttributesResponse>
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2

- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

GetPlatformApplicationAttributes

Retrieves the attributes of the platform application object for the supported push notification services, such as APNS and GCM (Firebase Cloud Messaging). For more information, see Using Amazon SNS Mobile Push Notifications.

Request Parameters

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

PlatformApplicationArn

PlatformApplicationArn for GetPlatformApplicationAttributesInput.

Type: String

Required: Yes

Response Elements

The following element is returned by the service.

Attributes , Attributes.entry.N.key (key), Attributes.entry.N.value (value)

Attributes include the following:

- AppleCertificateExpiryDate – The expiry date of the SSL certificate used to configure certificate-based authentication.
- ApplePlatformTeamID – The Apple developer account ID used to configure token-based authentication.
- ApplePlatformBundleID – The app identifier used to configure token-based authentication.
- AuthenticationMethod – Returns the credential type used when sending push notifications from application to APNS/APNS_Sandbox, or application to GCM.
  - APNS – Returns the token or certificate.
  - GCM – Returns the token or key.
- EventEndpointCreated – Topic ARN to which EndpointCreated event notifications should be sent.

- `EventEndpointDeleted` – Topic ARN to which EndpointDeleted event notifications should be sent.

- `EventEndpointUpdated` – Topic ARN to which EndpointUpdate event notifications should be sent.

- `EventDeliveryFailure` – Topic ARN to which DeliveryFailure event notifications should be sent upon Direct Publish delivery failure (permanent) to one of the application's endpoints.

Type: String to string map

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

NotFound

Indicates that the requested resource does not exist.

HTTP Status Code: 404

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see [Examples of the complete Signature Version 4 signing process (Python)](#) in the *AWS General Reference*.

Example

This example illustrates one usage of GetPlatformApplicationAttributes.

Sample Request

```
https://sns.us-west-2.amazonaws.com/?Action=GetPlatformApplicationAttributes
&PlatformApplicationArn=arn%3Aaws%3Asns%3Aus-west-2%3A123456789012%3Aapp%2FGCM
%2Fgcmpushapp
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<GetPlatformApplicationAttributesResponse xmlns="https://sns.amazonaws.com/
doc/2010-03-31/">
    <GetPlatformApplicationAttributesResult>
        <Attributes>
            <entry>
                <key>AllowEndpointPolicies</key>
                <value>false</value>
            </entry>
        </Attributes>
    </GetPlatformApplicationAttributesResult>
    <ResponseMetadata>
        <RequestId>74848df2-87f6-55ed-890c-c7be80442462</RequestId>
    </ResponseMetadata>
</GetPlatformApplicationAttributesResponse>
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3

- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

GetSMSAttributes

Returns the settings for sending SMS messages from your AWS account.

These settings are set with the `SetSMSAttributes` action.

Request Parameters

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

attributes.member.N

A list of the individual attribute names, such as `MonthlySpendLimit`, for which you want values.

For all attribute names, see SetSMSAttributes.

If you don't use this parameter, Amazon SNS returns all SMS attributes.

Type: Array of strings

Required: No

Response Elements

The following element is returned by the service.

attributes , attributes.entry.N.key (key), attributes.entry.N.value (value)

The SMS attribute names and their values.

Type: String to string map

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

Throttled

Indicates that the rate at which requests have been submitted for this action exceeds the limit
for your Amazon Web Services account.

message

Throttled request.

HTTP Status Code: 429

See Also

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

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

GetSMSSandboxAccountStatus

Retrieves the SMS sandbox status for the calling AWS account in the target AWS Region.

When you start using Amazon SNS to send SMS messages, your AWS account is in the *SMS sandbox*. The SMS sandbox provides a safe environment for you to try Amazon SNS features without risking your reputation as an SMS sender. While your AWS account is in the SMS sandbox, you can use all of the features of Amazon SNS. However, you can send SMS messages only to verified destination phone numbers. For more information, including how to move out of the sandbox to send messages without restrictions, see SMS sandbox in the *Amazon SNS Developer Guide*.

Response Elements

The following element is returned by the service.

IsInSandbox

Indicates whether the calling AWS account is in the SMS sandbox.

Type: Boolean

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

Throttled

Indicates that the rate at which requests have been submitted for this action exceeds the limit for your Amazon Web Services account.

message

Throttled request.

HTTP Status Code: 429

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see Examples of the complete Signature Version 4 signing process (Python) in the *AWS General Reference*.

Example

This example illustrates one usage of GetSMSSandboxAccountStatus.

Sample Request

```
https://sns.us-west-2.amazonaws.com/?Action=GetSMSSandboxAccountStatus
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<GetSMSSandboxAccountStatusResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <GetSMSSandboxAccountStatusResult>
            <IsInSandbox>true</IsInSandbox>
    </GetSMSSandboxAccountStatusResult>
    <ResponseMetadata>
        <RequestId>197f9501-7eca-5151-8d68-cdfb83a62aeb</RequestId>
    </ResponseMetadata>
</GetSMSSandboxAccountStatusResponse>
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4

- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

GetSubscriptionAttributes

Returns all of the properties of a subscription.

Request Parameters

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

SubscriptionArn

The ARN of the subscription whose properties you want to get.

Type: String

Required: Yes

Response Elements

The following element is returned by the service.

Attributes , Attributes.entry.N.key (key), Attributes.entry.N.value (value)

A map of the subscription's attributes. Attributes in this map include the following:

- `ConfirmationWasAuthenticated` – `true` if the subscription confirmation request was authenticated.
- `DeliveryPolicy` – The JSON serialization of the subscription's delivery policy.
- `EffectiveDeliveryPolicy` – The JSON serialization of the effective delivery policy that takes into account the topic delivery policy and account system defaults.
- `FilterPolicy` – The filter policy JSON that is assigned to the subscription. For more information, see [Amazon SNS Message Filtering](#) in the *Amazon SNS Developer Guide*.
- `FilterPolicyScope` – This attribute lets you choose the filtering scope by using one of the following string value types:
  - `MessageAttributes` (default) – The filter is applied on the message attributes.
  - `MessageBody` – The filter is applied on the message body.
- `Owner` – The AWS account ID of the subscription's owner.
- `PendingConfirmation` – `true` if the subscription hasn't been confirmed. To confirm a pending subscription, call the `ConfirmSubscription` action with a confirmation token.

- `RawMessageDelivery` – `true` if raw message delivery is enabled for the subscription. Raw messages are free of JSON formatting and can be sent to HTTP/S and Amazon SQS endpoints.

- `RedrivePolicy` – When specified, sends undeliverable messages to the specified Amazon SQS dead-letter queue. Messages that can't be delivered due to client errors (for example, when the subscribed endpoint is unreachable) or server errors (for example, when the service that powers the subscribed endpoint becomes unavailable) are held in the dead-letter queue for further analysis or reprocessing.

- `SubscriptionArn` – The subscription's ARN.

- `TopicArn` – The topic ARN that the subscription is associated with.

The following attribute applies only to Amazon Data Firehose delivery stream subscriptions:

- `SubscriptionRoleArn` – The ARN of the IAM role that has the following:

  - Permission to write to the Firehose delivery stream

  - Amazon SNS listed as a trusted entity

  Specifying a valid ARN for this attribute is required for Firehose delivery stream subscriptions. For more information, see Fanout to Firehose delivery streams in the *Amazon SNS Developer Guide*.

Type: String to string map

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

NotFound

Indicates that the requested resource does not exist.

HTTP Status Code: 404

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see [Examples of the complete Signature Version 4 signing process (Python)](#) in the *AWS General Reference*.

Example

This example illustrates one usage of GetSubscriptionAttributes.

Sample Request

```
https://sns.us-east-2.amazonaws.com/?Action=GetSubscriptionAttributes
&SubscriptionArn=arn%3Aaws%3Asns%3Aus-east-2%3A123456789012%3AMy-Topic
%3A80289ba6-0fd4-4079-afb4-ce8c8260f0ca
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<GetSubscriptionAttributesResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <GetSubscriptionAttributesResult>
        <Attributes>
            <entry>
                <key>Owner</key>
                <value>123456789012</value>
            </entry>
            <entry>
                <key>DeliveryPolicy</key>
                <value>{&quot;healthyRetryPolicy&quot;:{&quot;numRetries&quot;:10}}</value>
            </entry>
            <entry>
                <key>SubscriptionArn</key>
```

```
                <value>arn:aws:sns:us-east-2:123456789012:My-Topic:80289ba6-0fd4-4079-
afb4-ce8c8260f0ca</value>
            </entry>
        </Attributes>
    </GetSubscriptionAttributesResult>
    <ResponseMetadata>
        <RequestId>057f074c-33a7-11df-9540-99d0768312d3</RequestId>
    </ResponseMetadata>
</GetSubscriptionAttributesResponse>
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

GetTopicAttributes

Returns all of the properties of a topic. Topic properties returned might differ based on the authorization of the user.

Request Parameters

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

TopicArn

The ARN of the topic whose properties you want to get.

Type: String

Required: Yes

Response Elements

The following element is returned by the service.

Attributes , Attributes.entry.N.key (key), Attributes.entry.N.value (value)

A map of the topic's attributes. Attributes in this map include the following:

- `DeliveryPolicy` – The JSON serialization of the topic's delivery policy.
- `DisplayName` – The human-readable name used in the `From` field for notifications to `email` and `email-json` endpoints.
- `EffectiveDeliveryPolicy` – The JSON serialization of the effective delivery policy, taking system defaults into account.
- `Owner` – The AWS account ID of the topic's owner.
- `Policy` – The JSON serialization of the topic's access control policy.
- `SignatureVersion` – The signature version corresponds to the hashing algorithm used while creating the signature of the notifications, subscription confirmations, or unsubscribe confirmation messages sent by Amazon SNS.

  - By default, `SignatureVersion` is set to **1**. The signature is a Base64-encoded **SHA1withRSA** signature.

  - When you set `SignatureVersion` to **2**. Amazon SNS uses a Base64-encoded **SHA256withRSA** signature.

> **ⓘ Note**
>
> If the API response does not include the `SignatureVersion` attribute, it means that the `SignatureVersion` for the topic has value **1**.

- `SubscriptionsConfirmed` – The number of confirmed subscriptions for the topic.

- `SubscriptionsDeleted` – The number of deleted subscriptions for the topic.

- `SubscriptionsPending` – The number of subscriptions pending confirmation for the topic.

- `TopicArn` – The topic's ARN.

- `TracingConfig` – Tracing mode of an Amazon SNS topic. By default `TracingConfig` is set to `PassThrough`, and the topic passes through the tracing header it receives from an Amazon SNS publisher to its subscriptions. If set to `Active`, Amazon SNS will vend X-Ray segment data to topic owner account if the sampled flag in the tracing header is true. This is only supported on standard topics.

The following attribute applies only to [server-side-encryption](#):

- `KmsMasterKeyId` - The ID of an AWS managed customer master key (CMK) for Amazon SNS or a custom CMK. For more information, see [Key Terms](#). For more examples, see [KeyId](#) in the *AWS Key Management Service API Reference*.

The following attributes apply only to [FIFO topics](#):

- `ArchivePolicy` – The policy that sets the retention period for messages stored in the message archive of an Amazon SNS FIFO topic.

- `BeginningArchiveTime` – The earliest starting point at which a message in the topic's archive can be replayed from. This point in time is based on the configured message retention period set by the topic's message archiving policy.

- `ContentBasedDeduplication` – Enables content-based deduplication for FIFO topics.

  - By default, `ContentBasedDeduplication` is set to `false`. If you create a FIFO topic and this attribute is `false`, you must specify a value for the `MessageDeduplicationId` parameter for the [Publish](#) action.

  - When you set `ContentBasedDeduplication` to `true`, Amazon SNS uses a SHA-256 hash to generate the `MessageDeduplicationId` using the body of the message (but not the attributes of the message).

(Optional) To override the generated value, you can specify a value for the `MessageDeduplicationId` parameter for the `Publish` action.

- `FifoTopic` – When this is set to `true`, a FIFO topic is created.

Type: String to string map

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

InvalidSecurity

The credential signature isn't valid. You must use an HTTPS endpoint and sign your request using Signature Version 4.

HTTP Status Code: 403

NotFound

Indicates that the requested resource does not exist.

HTTP Status Code: 404

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see [Examples of the complete Signature Version 4 signing process (Python)](#) in the *AWS General Reference.*

Example

This example illustrates one usage of GetTopicAttributes.

Sample Request

```
https://sns.us-east-2.amazonaws.com/?Action=GetTopicAttributes
&TopicArn=arn%3Aaws%3Asns%3Aus-east-2%3A123456789012%3AMy-Topic
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<GetTopicAttributesResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <GetTopicAttributesResult>
        <Attributes>
            <entry>
                <key>Owner</key>
                <value>123456789012</value>
            </entry>
            <entry>
                <key>Policy</key>

 <value>{&quot;Version&quot;:&quot;2008-10-17&quot;,&quot;Id&quot;:&quot;us-
east-2/698519295917/test__default_policy_ID&quot;,&quot;Statement&quot;:
[{&quot;Effect&quot;:&quot;Allow&quot;,&quot;Sid&quot;:&quot;us-
east-2/698519295917/test__default_statement_ID&quot;,&quot;Principal&quot;:
{&quot;AWS&quot;:&quot;*&quot;},&quot;Action&quot;:
[&quot;SNS:GetTopicAttributes&quot;,&quot;SNS:SetTopicAttributes&quot;,&quot;SNS:AddPermission&
east-2:698519295917:test&quot;,&quot;Condition&quot;:{&quot;StringLike&quot;:
{&quot;AWS:SourceArn&quot;:&quot;arn:aws:*:*:698519295917:*&quot;}}}]}</value>
            </entry>
            <entry>
                <key>TopicArn</key>
                <value>arn:aws:sns:us-east-2:123456789012:My-Topic</value>
            </entry>
```

```
            </Attributes>
        </GetTopicAttributesResult>
        <ResponseMetadata>
            <RequestId>057f074c-33a7-11df-9540-99d0768312d3</RequestId>
        </ResponseMetadata>
</GetTopicAttributesResponse>
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListEndpointsByPlatformApplication

Lists the endpoints and endpoint attributes for devices in a supported push notification service, such as GCM (Firebase Cloud Messaging) and APNS. The results for `ListEndpointsByPlatformApplication` are paginated and return a limited list of endpoints, up to 100. If additional records are available after the first page results, then a NextToken string will be returned. To receive the next page, you call `ListEndpointsByPlatformApplication` again using the NextToken string received from the previous call. When there are no more records to return, NextToken will be null. For more information, see [Using Amazon SNS Mobile Push Notifications](#).

This action is throttled at 30 transactions per second (TPS).

Request Parameters

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

NextToken

`NextToken` string is used when calling `ListEndpointsByPlatformApplication` action to retrieve additional records that are available after the first page results.

Type: String

Required: No

PlatformApplicationArn

`PlatformApplicationArn` for `ListEndpointsByPlatformApplicationInput` action.

Type: String

Required: Yes

Response Elements

The following elements are returned by the service.

Endpoints.member.N

Endpoints returned for `ListEndpointsByPlatformApplication` action.

Type: Array of [Endpoint](#) objects

NextToken

`NextToken` string is returned when calling `ListEndpointsByPlatformApplication` action if additional records are available after the first page results.

Type: String

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

NotFound

Indicates that the requested resource does not exist.

HTTP Status Code: 404

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see [Examples of the complete Signature Version 4 signing process (Python)](#) in the *AWS General Reference*.

Example

This example illustrates one usage of ListEndpointsByPlatformApplication.

Sample Request

```
https://sns.us-west-2.amazonaws.com/?Action=ListEndpointsByPlatformApplication
&PlatformApplicationArn=arn%3Aaws%3Asns%3Aus-west-2%3A123456789012%3Aapp%2FGCM
%2Fgcmpushapp
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<ListEndpointsByPlatformApplicationResponse xmlns="https://sns.amazonaws.com/
doc/2010-03-31/">
    <ListEndpointsByPlatformApplicationResult>
        <Endpoints>
            <member>
                <EndpointArn>arn:aws:sns:us-west-2:123456789012:endpoint/GCM/
gcmpushapp/5e3e9847-3183-3f18-a7e8-671c3a57d4b3</EndpointArn>
                <Attributes>
                    <entry>
                        <key>Enabled</key>
                        <value>true</value>
                    </entry>
                    <entry>
                        <key>CustomUserData</key>
                        <value>UserId=27576823</value>
                    </entry>
                    <entry>
                        <key>Token</key>

 <value>APA91bGi7fFachkC1xjlqT66VYEucGHochmf1VQAr9k...jsM0PKPxKhddCzx6paEsyay9Zn3D4wNUJb8m6HZrB
value>
                    </entry>
                </Attributes>
            </member>
        </Endpoints>
    </ListEndpointsByPlatformApplicationResult>
    <ResponseMetadata>
        <RequestId>9a48768c-dac8-5a60-aec0-3cc27ea08d96</RequestId>
    </ResponseMetadata>
```

```
</ListEndpointsByPlatformApplicationResponse>
```

See Also

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

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ListOriginationNumbers

Lists the calling AWS account's dedicated origination numbers and their metadata. For more information about origination numbers, see [Origination numbers](#) in the *Amazon SNS Developer Guide*.

Request Parameters

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

MaxResults

The maximum number of origination numbers to return.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 30.

Required: No

NextToken

Token that the previous `ListOriginationNumbers` request returns.

Type: String

Required: No

Response Elements

The following elements are returned by the service.

NextToken

A `NextToken` string is returned when you call the `ListOriginationNumbers` operation if additional pages of records are available.

Type: String

PhoneNumbers.member.N

A list of the calling account's verified and pending origination numbers.

Type: Array of [PhoneNumberInformation](#) objects

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

Throttled

Indicates that the rate at which requests have been submitted for this action exceeds the limit for your Amazon Web Services account.

message

Throttled request.

HTTP Status Code: 429

Validation

Indicates that a parameter in the request is invalid.

HTTP Status Code: 400

Examples

Example

This example illustrates one usage of ListOriginationNumbers.

Sample Request

```
https://sns.us-west-2.amazonaws.com/?Action=ListOriginationNumbers
&NextToken=AAMAATKBfxv6_MR2sl2KtICrU2ksVr9xAtdrIFgK60DYBC7S9uDbQFIkR6ZUugDSulzDRrnUbhQIlq3ZOg
%3D%3D
&MaxResults=2
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<ListOriginationNumbersResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <ListOriginationNumbersResult>

 <NextToken>eyJBd3NBY2NvdW50SWQiOnsicyI6IjU3MjQ1OTY4NzAxNCJ9LCJEZXN0aW5hdGlvbkBob25lTnVtYmVyIjp
NextToken>
        <PhoneNumbers>
            <member>
                <CreatedAt>1611952514</CreatedAt>
                <Iso2CountryCode>US</Iso2CountryCode>
                <NumberCapabilities>
                    <member>SMS<member>
                </NumberCapabilities>
                <PhoneNumber>+12065550100</PhoneNumber>
                <RouteType>Transactional</RouteType>
                <Status>ACTIVE</Status>
            </member>
            <member>
                <CreatedAt>1611952589</CreatedAt>
                <Iso2CountryCode>CA</Iso2CountryCode>
                <NumberCapabilities>
                    <member>SMS</member>
                    <member>VOICE</member>
                </NumberCapabilities>
                <PhoneNumber>+12065550199</PhoneNumber>
                <RouteType>Promotional</RouteType>
                <Status>ACTIVE</Status>
            </member>
        </PhoneNumbers>
    </ListOriginationNumbersResult>
    <ResponseMetadata>
        <RequestId>a2430664-0bf0-559e-a20f-5f6bb47ae9b9</RequestId>
    </ResponseMetadata>
```

```
</ListOriginationNumbersResponse>
```

See Also

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

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ListPhoneNumbersOptedOut

Returns a list of phone numbers that are opted out, meaning you cannot send SMS messages to them.

The results for `ListPhoneNumbersOptedOut` are paginated, and each page returns up to 100 phone numbers. If additional phone numbers are available after the first page of results, then a `NextToken` string will be returned. To receive the next page, you call `ListPhoneNumbersOptedOut` again using the `NextToken` string received from the previous call. When there are no more records to return, `NextToken` will be null.

Request Parameters

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

nextToken

A `NextToken` string is used when you call the `ListPhoneNumbersOptedOut` action to retrieve additional records that are available after the first page of results.

Type: String

Required: No

Response Elements

The following elements are returned by the service.

nextToken

A `NextToken` string is returned when you call the `ListPhoneNumbersOptedOut` action if additional records are available after the first page of results.

Type: String

phoneNumbers.member.N

A list of phone numbers that are opted out of receiving SMS messages. The list is paginated, and each page can contain up to 100 phone numbers.

Type: Array of strings

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

Throttled

Indicates that the rate at which requests have been submitted for this action exceeds the limit for your Amazon Web Services account.

message

Throttled request.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2

- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ListPlatformApplications

Lists the platform application objects for the supported push notification services, such as APNS and GCM (Firebase Cloud Messaging). The results for `ListPlatformApplications` are paginated and return a limited list of applications, up to 100. If additional records are available after the first page results, then a NextToken string will be returned. To receive the next page, you call `ListPlatformApplications` using the NextToken string received from the previous call. When there are no more records to return, `NextToken` will be null. For more information, see [Using Amazon SNS Mobile Push Notifications](#).

This action is throttled at 15 transactions per second (TPS).

Request Parameters

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

NextToken

> `NextToken` string is used when calling `ListPlatformApplications` action to retrieve additional records that are available after the first page results.
>
> Type: String
>
> Required: No

Response Elements

The following elements are returned by the service.

NextToken

> `NextToken` string is returned when calling `ListPlatformApplications` action if additional records are available after the first page results.
>
> Type: String

PlatformApplications.member.N

> Platform applications returned when calling `ListPlatformApplications` action.
>
> Type: Array of [PlatformApplication](#) objects

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see [Examples of the complete Signature Version 4 signing process (Python)](#) in the *AWS General Reference*.

Example

This example illustrates one usage of ListPlatformApplications.

Sample Request

```
https://sns.us-west-2.amazonaws.com/?Action=ListPlatformApplications
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<ListPlatformApplicationsResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <ListPlatformApplicationsResult>
        <PlatformApplications>
```

```
                <member>
                        <PlatformApplicationArn>arn:aws:sns:us-west-2:123456789012:app/
APNS_SANDBOX/apnspushapp</PlatformApplicationArn>
                        <Attributes>
                            <entry>
                                <key>AllowEndpointPolicies</key>
                                <value>false</value>
                            </entry>
                        </Attributes>
                </member>
                <member>
                        <PlatformApplicationArn>arn:aws:sns:us-west-2:123456789012:app/GCM/
gcmpushapp</PlatformApplicationArn>
                        <Attributes>
                            <entry>
                                <key>AllowEndpointPolicies</key>
                                <value>false</value>
                            </entry>
                        </Attributes>
                </member>
        </PlatformApplications>
    </ListPlatformApplicationsResult>
    <ResponseMetadata>
        <RequestId>315a335e-85d8-52df-9349-791283cbb529</RequestId>
    </ResponseMetadata>
</ListPlatformApplicationsResponse>
```

See Also

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

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)

- [AWS SDK for Python](#)

- [AWS SDK for Ruby V3](#)

ListSMSSandboxPhoneNumbers

Lists the calling AWS account's current verified and pending destination phone numbers in the SMS sandbox.

When you start using Amazon SNS to send SMS messages, your AWS account is in the *SMS sandbox*. The SMS sandbox provides a safe environment for you to try Amazon SNS features without risking your reputation as an SMS sender. While your AWS account is in the SMS sandbox, you can use all of the features of Amazon SNS. However, you can send SMS messages only to verified destination phone numbers. For more information, including how to move out of the sandbox to send messages without restrictions, see [SMS sandbox](#) in the *Amazon SNS Developer Guide*.

Request Parameters

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

MaxResults

The maximum number of phone numbers to return.

Type: Integer

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

Required: No

NextToken

Token that the previous `ListSMSSandboxPhoneNumbersInput` request returns.

Type: String

Required: No

Response Elements

The following elements are returned by the service.

NextToken

A `NextToken` string is returned when you call the `ListSMSSandboxPhoneNumbersInput` operation if additional pages of records are available.

Type: String

PhoneNumbers.member.N

A list of the calling account's pending and verified phone numbers.

Type: Array of [SMSSandboxPhoneNumber](#) objects

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

ResourceNotFound

Can't perform the action on the specified resource. Make sure that the resource exists.

HTTP Status Code: 404

Throttled

Indicates that the rate at which requests have been submitted for this action exceeds the limit for your Amazon Web Services account.

message

>   Throttled request.

>   HTTP Status Code: 429

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see Examples of the complete Signature Version 4 signing process (Python) in the *AWS General Reference*.

Example

This example illustrates one usage of ListSMSSandboxPhoneNumbers.

Sample Request

```
https://sns.us-west-2.amazonaws.com/?Action=ListSMSSandboxPhoneNumbers
&NextToken=eyJBd3NBY2NvdW50SWQiOnsicyI6IjU3MjQ1OTY4NzAxNCJ9LCJEZXN0aW5hdGlvblBob25lTnVtYmVyIjp7
%3D%3D
&MaxResults=2
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<ListSMSSandboxPhoneNumbersResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <ListSMSSandboxPhoneNumbersResult>

 <NextToken>eyJBd3NBY2NvdW50SWQiOnsicyI6IjU3MjQ1OTY4NzAxNCJ9LCJEZXN0aW5hdGlvblBob25lTnVtYmVyIjp
NextToken>
        <PhoneNumbers>
            <member>
                <PhoneNumber>+12065550111</PhoneNumber>
                <Status>Pending</Status>
            </member>
            <member>
                <PhoneNumber>+12065550122</PhoneNumber>
                <Status>Verified</Status>
            </member>
```

```
            </PhoneNumbers>
        </ListSMSSandboxPhoneNumbersResult>
        <ResponseMetadata>
            <RequestId>6b6ae37e-3200-54b6-8882-bb84f47c2141</RequestId>
        </ResponseMetadata>
    </ListSMSSandboxPhoneNumbersResponse>
```

See Also

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

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ListSubscriptions

Returns a list of the requester's subscriptions. Each call returns a limited list of subscriptions, up to 100. If there are more subscriptions, a `NextToken` is also returned. Use the `NextToken` parameter in a new `ListSubscriptions` call to get further results.

This action is throttled at 30 transactions per second (TPS).

Request Parameters

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

NextToken

Token returned by the previous `ListSubscriptions` request.

Type: String

Required: No

Response Elements

The following elements are returned by the service.

NextToken

Token to pass along to the next `ListSubscriptions` request. This element is returned if there are more subscriptions to retrieve.

Type: String

Subscriptions.member.N

A list of subscriptions.

Type: Array of [Subscription](#) objects

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see [Examples of the complete Signature Version 4 signing process (Python)](#) in the *AWS General Reference*.

Example

This example illustrates one usage of ListSubscriptions.

Sample Request

```
https://sns.us-east-2.amazonaws.com/?Action=ListSubscriptions
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<ListSubscriptionsResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <ListSubscriptionsResult>
        <Subscriptions>
            <member>
                <TopicArn>arn:aws:sns:us-east-2:698519295917:My-Topic</TopicArn>
                <Protocol>email</Protocol>
```

```
                <SubscriptionArn>arn:aws:sns:us-east-2:123456789012:My-
Topic:80289ba6-0fd4-4079-afb4-ce8c8260f0ca</SubscriptionArn>
                <Owner>123456789012</Owner>
                <Endpoint>example@amazon.com</Endpoint>
            </member>
        </Subscriptions>
    </ListSubscriptionsResult>
    <ResponseMetadata>
        <RequestId>384ac68d-3775-11df-8963-01868b7c937a</RequestId>
    </ResponseMetadata>
</ListSubscriptionsResponse>
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListSubscriptionsByTopic

Returns a list of the subscriptions to a specific topic. Each call returns a limited list of subscriptions, up to 100. If there are more subscriptions, a `NextToken` is also returned. Use the `NextToken` parameter in a new `ListSubscriptionsByTopic` call to get further results.

This action is throttled at 30 transactions per second (TPS).

Request Parameters

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

NextToken

Token returned by the previous `ListSubscriptionsByTopic` request.

Type: String

Required: No

TopicArn

The ARN of the topic for which you wish to find subscriptions.

Type: String

Required: Yes

Response Elements

The following elements are returned by the service.

NextToken

Token to pass along to the next `ListSubscriptionsByTopic` request. This element is returned if there are more subscriptions to retrieve.

Type: String

Subscriptions.member.N

A list of subscriptions.

Type: Array of [Subscription](#) objects

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

NotFound

Indicates that the requested resource does not exist.

HTTP Status Code: 404

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see [Examples of the complete Signature Version 4 signing process (Python)](#) in the *AWS General Reference*.

Example

This example illustrates one usage of ListSubscriptionsByTopic.

Sample Request

```
https://sns.us-east-2.amazonaws.com/?Action=ListSubscriptionsByTopic
```

```
&TopicArn=arn%3Aaws%3Asns%3Aus-east-2%3A123456789012%3AMy-Topic
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<ListSubscriptionsByTopicResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <ListSubscriptionsByTopicResult>
        <Subscriptions>
            <member>
                <TopicArn>arn:aws:sns:us-east-2:123456789012:My-Topic</TopicArn>
                <Protocol>email</Protocol>
                <SubscriptionArn>arn:aws:sns:us-east-2:123456789012:My-
Topic:80289ba6-0fd4-4079-afb4-ce8c8260f0ca</SubscriptionArn>
                <Owner>123456789012</Owner>
                <Endpoint>example@amazon.com</Endpoint>
            </member>
        </Subscriptions>
    </ListSubscriptionsByTopicResult>
    <ResponseMetadata>
        <RequestId>b9275252-3774-11df-9540-99d0768312d3</RequestId>
    </ResponseMetadata>
</ListSubscriptionsByTopicResponse>
```

See Also

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

- [AWS Command Line Interface V2](#)

- [AWS SDK for .NET V4](#)

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

- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)

- [AWS SDK for JavaScript V3](#)

- [AWS SDK for Kotlin](#)

- [AWS SDK for PHP V3](#)

- [AWS SDK for Python](#)

- [AWS SDK for Ruby V3](#)

ListTagsForResource

List all tags added to the specified Amazon SNS topic. For an overview, see [Amazon SNS Tags](#) in the *Amazon Simple Notification Service Developer Guide*.

Request Parameters

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

ResourceArn

The ARN of the topic for which to list tags.

Type: String

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

Required: Yes

Response Elements

The following element is returned by the service.

Tags.member.N

The tags associated with the specified topic.

Type: Array of [Tag](#) objects

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

ConcurrentAccess

Can't perform multiple operations on a tag simultaneously. Perform the operations sequentially.

HTTP Status Code: 400

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

ResourceNotFound

Can't perform the action on the specified resource. Make sure that the resource exists.

HTTP Status Code: 404

TagPolicy

The request doesn't comply with the IAM tag policy. Correct your request and then retry it.

HTTP Status Code: 400

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see [Examples of the complete Signature Version 4 signing process (Python)](#) in the *AWS General Reference*.

Example

This example illustrates one usage of ListTagsForResource.

Sample Request

```
http://sns.us-west-2.amazonaws.com/&Action=ListTagsForResource
&ResourceArn=arn%3Aaws%3Asns%3Aus-west-2%3A123456789012%3Atagging
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<ListTagsForResourceResponse>
    <ListTagsForResourceResult>
        <Tags>
            <member>
```

```
                <Value>tagValue</Value>
                <Key>tagKey</Key>
            </member>
        </Tags>
    </ListTagsForResourceResult>
    <ResponseMetadata>
        <RequestId>123456a7-b8c9-01de-fg2h-3456i7j890k1</RequestId>
    </ResponseMetadata>
</ListTagsForResourceResponse>
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListTopics

Returns a list of the requester's topics. Each call returns a limited list of topics, up to 100. If there are more topics, a `NextToken` is also returned. Use the `NextToken` parameter in a new `ListTopics` call to get further results.

This action is throttled at 30 transactions per second (TPS).

Request Parameters

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

NextToken

Token returned by the previous `ListTopics` request.

Type: String

Required: No

Response Elements

The following elements are returned by the service.

NextToken

Token to pass along to the next `ListTopics` request. This element is returned if there are additional topics to retrieve.

Type: String

Topics.member.N

A list of topic ARNs.

Type: Array of [Topic](#) objects

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

See Also

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

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

OptInPhoneNumber

Use this request to opt in a phone number that is opted out, which enables you to resume sending SMS messages to the number.

You can opt in a phone number only once every 30 days.

Request Parameters

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

phoneNumber

> The phone number to opt in. Use E.164 format.
>
> Type: String
>
> Required: Yes

Errors

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

AuthorizationError

> Indicates that the user has been denied access to the requested resource.
>
> HTTP Status Code: 403

InternalError

> Indicates an internal service error.
>
> HTTP Status Code: 500

InvalidParameter

> Indicates that a request parameter does not comply with the associated constraints.
>
> HTTP Status Code: 400

Throttled

> Indicates that the rate at which requests have been submitted for this action exceeds the limit for your Amazon Web Services account.

message

     Throttled request.

    HTTP Status Code: 429

See Also

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

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

Publish

Sends a message to an Amazon SNS topic, a text message (SMS message) directly to a phone number, or a message to a mobile platform endpoint (when you specify the `TargetArn`).

If you send a message to a topic, Amazon SNS delivers the message to each endpoint that is subscribed to the topic. The format of the message depends on the notification protocol for each subscribed endpoint.

When a `messageId` is returned, the message is saved and Amazon SNS immediately delivers it to subscribers.

To use the `Publish` action for publishing a message to a mobile endpoint, such as an app on a Kindle device or mobile phone, you must specify the EndpointArn for the TargetArn parameter. The EndpointArn is returned when making a call with the `CreatePlatformEndpoint` action. The second example below shows a request and response for publishing to a mobile endpoint.

For more information about formatting messages, see [Send Custom Platform-Specific Payloads in Messages to Mobile Devices](#).

> ⚠️ **Important**
>
> You can publish messages only to topics and endpoints in the same AWS Region.

Request Parameters

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

Message

The message you want to send.

If you are publishing to a topic and you want to send the same message to all transport protocols, include the text of the message as a String value. If you want to send different messages for each transport protocol, set the value of the `MessageStructure` parameter to `json` and use a JSON object for the `Message` parameter. See the Examples section for the format of the JSON object.

Constraints:

- With the exception of SMS, messages must be UTF-8 encoded strings and at most 256 KB in size (262,144 bytes, not 262,144 characters).

- For SMS, each message can contain up to 140 characters. This character limit depends on the encoding schema. For example, an SMS message can contain 160 GSM characters, 140 ASCII characters, or 70 UCS-2 characters.

  If you publish a message that exceeds this size limit, Amazon SNS sends the message as multiple messages, each fitting within the size limit. Messages aren't truncated mid-word but are cut off at whole-word boundaries.

  The total size limit for a single SMS `Publish` action is 1,600 characters.

JSON-specific constraints:

- Keys in the JSON object that correspond to supported transport protocols must have simple JSON string values.

- The values will be parsed (unescaped) before they are used in outgoing messages.

- Outbound notifications are JSON encoded (meaning that the characters will be reescaped for sending).

- Values have a minimum length of 0 (the empty string, "", is allowed).

- Values have a maximum length bounded by the overall message size (so, including multiple protocols may limit message sizes).

- Non-string values will cause the key to be ignored.

- Keys that do not correspond to supported transport protocols are ignored.

- Duplicate keys are not allowed.

- Failure to parse or validate any key or value in the message will cause the `Publish` call to return an error (no partial delivery).

Type: String

Required: Yes

MessageAttributes , MessageAttributes.entry.N.Name (key), MessageAttributes.entry.N.Value (value)

Message attributes for Publish action.

Type: String to MessageAttributeValue object map

Required: No

MessageDeduplicationId

- This parameter applies only to FIFO (first-in-first-out) topics. The `MessageDeduplicationId` can contain up to 128 alphanumeric characters (`a-z, A-Z, 0-9`) and punctuation (`!"#$%&'()*+,-./:;<=>?@[\]^_`{|}~`).

- Every message must have a unique `MessageDeduplicationId`, which is a token used for deduplication of sent messages within the 5 minute minimum deduplication interval.

- The scope of deduplication depends on the `FifoThroughputScope` attribute, when set to `Topic` the message deduplication scope is across the entire topic, when set to `MessageGroup` the message deduplication scope is within each individual message group.

- If a message with a particular `MessageDeduplicationId` is sent successfully, subsequent messages within the deduplication scope and interval, with the same `MessageDeduplicationId`, are accepted successfully but aren't delivered.

- Every message must have a unique `MessageDeduplicationId`:

  - You may provide a `MessageDeduplicationId` explicitly.

  - If you aren't able to provide a `MessageDeduplicationId` and you enable `ContentBasedDeduplication` for your topic, Amazon SNS uses a SHA-256 hash to generate the `MessageDeduplicationId` using the body of the message (but not the attributes of the message).

  - If you don't provide a `MessageDeduplicationId` and the topic doesn't have `ContentBasedDeduplication` set, the action fails with an error.

  - If the topic has a `ContentBasedDeduplication` set, your `MessageDeduplicationId` overrides the generated one.

- When `ContentBasedDeduplication` is in effect, messages with identical content sent within the deduplication scope and interval are treated as duplicates and only one copy of the message is delivered.

- If you send one message with `ContentBasedDeduplication` enabled, and then another message with a `MessageDeduplicationId` that is the same as the one generated for the first `MessageDeduplicationId`, the two messages are treated as duplicates, within the deduplication scope and interval, and only one copy of the message is delivered.

Type: String

Required: No

MessageGroupId

The `MessageGroupId` can contain up to 128 alphanumeric characters (`a-z`, `A-Z`, `0-9`) and punctuation (`!"#$%&'()*+,-./:;<=>?@[\]^_`{|}~`).

For FIFO topics: The `MessageGroupId` is a tag that specifies that a message belongs to a specific message group. Messages that belong to the same message group are processed in a FIFO manner (however, messages in different message groups might be processed out of order). Every message must include a `MessageGroupId`.

For standard topics: The `MessageGroupId` is optional and is forwarded only to Amazon SQS standard subscriptions to activate [fair queues](). The `MessageGroupId` is not used for, or sent to, any other endpoint types. When provided, the same validation rules apply as for FIFO topics.

Type: String

Required: No

MessageStructure

Set `MessageStructure` to `json` if you want to send a different message for each protocol. For example, using one publish action, you can send a short message to your SMS subscribers and a longer message to your email subscribers. If you set `MessageStructure` to `json`, the value of the `Message` parameter must:

- be a syntactically valid JSON object; and

- contain at least a top-level JSON key of "default" with a value that is a string.

You can define other top-level keys that define the message you want to send to a specific transport protocol (e.g., "http").

Valid value: `json`

Type: String

Required: No

PhoneNumber

The phone number to which you want to deliver an SMS message. Use E.164 format.

If you don't specify a value for the `PhoneNumber` parameter, you must specify a value for the `TargetArn` or `TopicArn` parameters.

Type: String

Required: No

Subject

Optional parameter to be used as the "Subject" line when the message is delivered to email endpoints. This field will also be included, if present, in the standard JSON messages delivered to other endpoints.

Constraints: Subjects must be UTF-8 text with no line breaks or control characters, and less than 100 characters long.

Type: String

Required: No

TargetArn

If you don't specify a value for the `TargetArn` parameter, you must specify a value for the `PhoneNumber` or `TopicArn` parameters.

Type: String

Required: No

TopicArn

The topic you want to publish to.

If you don't specify a value for the `TopicArn` parameter, you must specify a value for the `PhoneNumber` or `TargetArn` parameters.

Type: String

Required: No

Response Elements

The following elements are returned by the service.

MessageId

Unique identifier assigned to the published message.

Length Constraint: Maximum 100 characters

Type: String

SequenceNumber

This response element applies only to FIFO (first-in-first-out) topics.

The sequence number is a large, non-consecutive number that Amazon SNS assigns to each message. The length of `SequenceNumber` is 128 bits. `SequenceNumber` continues to increase for each `MessageGroupId`.

Type: String

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

EndpointDisabled

Exception error indicating endpoint disabled.

message

Message for endpoint disabled.

HTTP Status Code: 400

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

InvalidSecurity

The credential signature isn't valid. You must use an HTTPS endpoint and sign your request using Signature Version 4.

HTTP Status Code: 403

KMSAccessDenied

The ciphertext references a key that doesn't exist or that you don't have access to.

HTTP Status Code: 400

KMSDisabled

The request was rejected because the specified AWS KMS key isn't enabled.

HTTP Status Code: 400

KMSInvalidState

The request was rejected because the state of the specified resource isn't valid for this request. For more information, see Key states of AWS KMS keys in the *AWS Key Management Service Developer Guide*.

HTTP Status Code: 400

KMSNotFound

The request was rejected because the specified entity or resource can't be found.

HTTP Status Code: 400

KMSOptInRequired

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

HTTP Status Code: 403

KMSThrottling

The request was denied due to request throttling. For more information about throttling, see Limits in the *AWS Key Management Service Developer Guide.*

HTTP Status Code: 400

NotFound

Indicates that the requested resource does not exist.

HTTP Status Code: 404

ParameterValueInvalid

Indicates that a request parameter does not comply with the associated constraints.

message

The parameter of an entry in a request doesn't abide by the specification.

HTTP Status Code: 400

PlatformApplicationDisabled

Exception error indicating platform application disabled.

message

Message for platform application disabled.

HTTP Status Code: 400

Validation

Indicates that a parameter in the request is invalid.

HTTP Status Code: 400

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see Examples of the complete Signature Version 4 signing process (Python) in the *AWS General Reference*.

Example

This example illustrates one usage of Publish.

Sample Request

```
https://sns.us-west-2.amazonaws.com/?Action=Publish
```

```
&TargetArn=arn%3Aaws%3Asns%3Aus-west-2%3A803981987763%3Aendpoint%2FAPNS_SANDBOX
%2Fpushapp%2F98e9ced9-f136-3893-9d60-776547eafebb
&Message=%7B%22default%22%3A%22This+is+the+default+Message%22%2C%22APNS_SANDBOX%22%3A
%22%7B+%5C%22aps%5C%22+%3A+%7B+%5C%22alert%5C%22+%3A+%5C%22You+have+got+email.%5C%22%2C
+%5C%22badge%5C%22+%3A+9%2C%5C%22sound%5C%22+%3A%5C%22default%5C%22%7D%7D%22%7D
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<PublishResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <PublishResult>
        <MessageId>567910cd-659e-55d4-8ccb-5aaf14679dc0</MessageId>
    </PublishResult>
    <ResponseMetadata>
        <RequestId>d74b8436-ae13-5ab4-a9ff-ce54dfea72a0</RequestId>
    </ResponseMetadata>
</PublishResponse>
```

Example

The following example publishes a different messages to each protocol:

The JSON format for `Message` is as follows:

```
{
    "default": "A message.",
    "email": "A message for email.",
    "email-json": "A message for email (JSON).",
    "http": "A message for HTTP.",
    "https": "A message for HTTPS.",
    "sqs": "A message for Amazon SQS."
}
```

Sample Request

```
https://sns.us-east-2.amazonaws.com/?Action=Publish
&TopicArn=arn%3Aaws%3Asns%3Aus-east-2%3A698519295917%3AMy-Topic
&Subject=My%20first%20message
&Message=Hello%20world%21
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<PublishResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <PublishResult>
        <MessageId>94f20ce6-13c5-43a0-9a9e-ca52d816e90b</MessageId>
    </PublishResult>
    <ResponseMetadata>
        <RequestId>f187a3c1-376f-11df-8963-01868b7c937a</RequestId>
    </ResponseMetadata>
</PublishResponse>
```

Example

The following example allows you to specify different message content for different transport protocols (SMS, email, and push notification):

The JSON format for `MessageStructure` is as follows:

```
  "default": "This is the default message",
  "email": "This is the email message",
  "sms": "This is the SMS message",
  "app1": "This is the message for app1",
  "app2": "This is the message for app2"
}
&Version=2010-03-31
&AUTHPARAMS
```

Sample Request

```
https://sns.us-east-2.amazonaws.com/?Action=Publish
&TopicArn=arn%3Aaws%3Asns%3Aus-east-2%3A698519295917%3AMy-Topic
&Subject=My%20first%20message
&Message=Hello%20world%21
&MessageStructure=json
&Message={
  "default": "This is the default message",
  "email": "This is the email message",
  "sms": "This is the SMS message",
  "app1": "This is the message for app1",
  "app2": "This is the message for app2"
}
```

```
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<PublishResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
  <PublishResult>
    <MessageId>95df01b4-ee98-5cb9-9069-4b046b850ca6</MessageId>
  </PublishResult>
  <ResponseMetadata>
    <RequestId>c6101522-8f6a-5d59-8e6e-cb9bc1bf0c9f</RequestId>
  </ResponseMetadata>
</PublishResponse>
```

See Also

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

- AWS Command Line Interface V2

- AWS SDK for .NET V4

- AWS SDK for C++

- AWS SDK for Go v2

- AWS SDK for Java V2

- AWS SDK for JavaScript V3

- AWS SDK for Kotlin

- AWS SDK for PHP V3

- AWS SDK for Python

- AWS SDK for Ruby V3

PublishBatch

Publishes up to 10 messages to the specified topic in a single batch. This is a batch version of the `Publish` API. If you try to send more than 10 messages in a single batch request, you will receive a `TooManyEntriesInBatchRequest` exception.

For FIFO topics, multiple messages within a single batch are published in the order they are sent, and messages are deduplicated within the batch and across batches for five minutes.

The result of publishing each message is reported individually in the response. Because the batch request can result in a combination of successful and unsuccessful actions, you should check for batch errors even when the call returns an HTTP status code of 200.

The maximum allowed individual message size and the maximum total payload size (the sum of the individual lengths of all of the batched messages) are both 256 KB (262,144 bytes).

> ⚠️ **Important**
>
> The `PublishBatch` API can send up to 10 messages at a time. If you attempt to send more than 10 messages in one request, you will encounter a `TooManyEntriesInBatchRequest` exception. In such cases, split your messages into multiple requests, each containing no more than 10 messages.

Some actions take lists of parameters. These lists are specified using the `param.n` notation. Values of n are integers starting from **1**. For example, a parameter list with two elements looks like this:

`&AttributeName.1=first`

`&AttributeName.2=second`

If you send a batch message to a topic, Amazon SNS publishes the batch message to each endpoint that is subscribed to the topic. The format of the batch message depends on the notification protocol for each subscribed endpoint.

When a `messageId` is returned, the batch message is saved, and Amazon SNS immediately delivers the message to subscribers.

Request Parameters

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

PublishBatchRequestEntries.member.N

A list of `PublishBatch` request entries to be sent to the SNS topic.

Type: Array of [PublishBatchRequestEntry](#) objects

Required: Yes

TopicArn

The Amazon resource name (ARN) of the topic you want to batch publish to.

Type: String

Required: Yes

Response Elements

The following elements are returned by the service.

Failed.member.N

A list of failed `PublishBatch` responses.

Type: Array of [BatchResultErrorEntry](#) objects

Successful.member.N

A list of successful `PublishBatch` responses.

Type: Array of [PublishBatchResultEntry](#) objects

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

BatchEntryIdsNotDistinct

Two or more batch entries in the request have the same `Id`.

HTTP Status Code: 400

BatchRequestTooLong

The length of all the batch messages put together is more than the limit.

HTTP Status Code: 400

EmptyBatchRequest

The batch request doesn't contain any entries.

HTTP Status Code: 400

EndpointDisabled

Exception error indicating endpoint disabled.

message

Message for endpoint disabled.

HTTP Status Code: 400

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidBatchEntryId

The Id of a batch entry in a batch request doesn't abide by the specification.

HTTP Status Code: 400

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

InvalidSecurity

The credential signature isn't valid. You must use an HTTPS endpoint and sign your request using Signature Version 4.

HTTP Status Code: 403

KMSAccessDenied

The ciphertext references a key that doesn't exist or that you don't have access to.

HTTP Status Code: 400

KMSDisabled

The request was rejected because the specified AWS KMS key isn't enabled.

HTTP Status Code: 400

KMSInvalidState

The request was rejected because the state of the specified resource isn't valid for this request. For more information, see Key states of AWS KMS keys in the *AWS Key Management Service Developer Guide*.

HTTP Status Code: 400

KMSNotFound

The request was rejected because the specified entity or resource can't be found.

HTTP Status Code: 400

KMSOptInRequired

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

HTTP Status Code: 403

KMSThrottling

The request was denied due to request throttling. For more information about throttling, see Limits in the *AWS Key Management Service Developer Guide.*

HTTP Status Code: 400

NotFound

Indicates that the requested resource does not exist.

HTTP Status Code: 404

ParameterValueInvalid

Indicates that a request parameter does not comply with the associated constraints.

message

The parameter of an entry in a request doesn't abide by the specification.

HTTP Status Code: 400

PlatformApplicationDisabled

Exception error indicating platform application disabled.

message

Message for platform application disabled.

HTTP Status Code: 400

TooManyEntriesInBatchRequest

The batch request contains more entries than permissible (more than 10).

HTTP Status Code: 400

Validation

Indicates that a parameter in the request is invalid.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)

- [AWS SDK for Python](#)

- [AWS SDK for Ruby V3](#)

PutDataProtectionPolicy

Adds or updates an inline policy document that is stored in the specified Amazon SNS topic.

Request Parameters

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

DataProtectionPolicy

The JSON serialization of the topic's `DataProtectionPolicy`.

The `DataProtectionPolicy` must be in JSON string format.

Length Constraints: Maximum length of 30,720.

Type: String

Required: Yes

ResourceArn

The ARN of the topic whose `DataProtectionPolicy` you want to add or update.

For more information about ARNs, see [Amazon Resource Names (ARNs)](#) in the AWS General Reference.

Type: String

Required: Yes

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

InvalidSecurity

The credential signature isn't valid. You must use an HTTPS endpoint and sign your request using Signature Version 4.

HTTP Status Code: 403

NotFound

Indicates that the requested resource does not exist.

HTTP Status Code: 404

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see Examples of the complete Signature Version 4 signing process (Python) in the *AWS General Reference*.

Example

This example illustrates one usage of `PutDataProtectionPolicy`.

Sample Request

```
https://sns.us-east-2.amazonaws.com/?Action=PutDataProtectionPolicy
&ResourceArn=arn%3Aaws%3Asns%3Aus-east-2%3A123456789012%3AMy-Topic
&DataProtectionPolicy=
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<PutDataProtectionPolicyResponse xmlns="http://sns.amazonaws.com/doc/2010-03-31/">
    <ResponseMetadata>
```

```
        <RequestId>e6616aef-1cf0-5c13-b454-31657d8ed10b</RequestId>
    </ResponseMetadata>
</PutDataProtectionPolicyResponse>
```

See Also

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

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

RemovePermission

Removes a statement from a topic's access control policy.

> ### ⓘ Note
>
> To remove the ability to change topic permissions, you must deny permissions to the `AddPermission`, `RemovePermission`, and `SetTopicAttributes` actions in your IAM policy.

Request Parameters

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

Label

The unique label of the statement you want to remove.

Type: String

Required: Yes

TopicArn

The ARN of the topic whose access control policy you wish to modify.

Type: String

Required: Yes

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

NotFound

Indicates that the requested resource does not exist.

HTTP Status Code: 404

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see Examples of the complete Signature Version 4 signing process (Python) in the *AWS General Reference*.

Example

This example illustrates one usage of RemovePermission.

Sample Request

```
https://sns.us-east-2.amazonaws.com/?Action=RemovePermission
&TopicArn=arn%3Aaws%3Asns%3Aus-east-2%3A123456789012%3AMy-Test
&Label=NewPermission
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<RemovePermissionResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <ResponseMetadata>
        <RequestId>d170b150-33a8-11df-995a-2d6fbe836cc1</RequestId>
    </ResponseMetadata>
```

```
</RemovePermissionResponse>
```

See Also

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

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

SetEndpointAttributes

Sets the attributes for an endpoint for a device on one of the supported push notification services, such as GCM (Firebase Cloud Messaging) and APNS. For more information, see Using Amazon SNS Mobile Push Notifications.

Request Parameters

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

Attributes , Attributes.entry.N.key (key), Attributes.entry.N.value (value)

> A map of the endpoint attributes. Attributes in this map include the following:
>
> - `CustomUserData` – arbitrary user data to associate with the endpoint. Amazon SNS does not use this data. The data must be in UTF-8 format and less than 2KB.
> - `Enabled` – flag that enables/disables delivery to the endpoint. Amazon SNS will set this to false when a notification service indicates to Amazon SNS that the endpoint is invalid. Users can set it back to true, typically after updating Token.
> - `Token` – device token, also referred to as a registration id, for an app and mobile device. This is returned from the notification service when an app and mobile device are registered with the notification service.
>
> Type: String to string map
>
> Required: Yes

EndpointArn

> EndpointArn used for `SetEndpointAttributes` action.
>
> Type: String
>
> Required: Yes

Errors

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

AuthorizationError

> Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

NotFound

Indicates that the requested resource does not exist.

HTTP Status Code: 404

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see [Examples of the complete Signature Version 4 signing process (Python)](#) in the *AWS General Reference*.

Example

This example illustrates one usage of SetEndpointAttributes.

Sample Request

```
https://sns.us-west-2.amazonaws.com/?Action=SetEndpointAttributes
&EndpointArn=arn%3Aaws%3Asns%3Aus-west-2%3A123456789012%3Aendpoint%2FGCM%2Fgcmpushapp
%2F5e3e9847-3183-3f18-a7e8-671c3a57d4b3
&Attributes.entry.1.key=CustomUserData
&Attributes.entry.1.value=My+custom+userdata
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<SetEndpointAttributesResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
```

```
    <ResponseMetadata>
        <RequestId>2fe0bfc7-3e85-5ee5-a9e2-f58b35e85f6a</RequestId>
    </ResponseMetadata>
</SetEndpointAttributesResponse>
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

SetPlatformApplicationAttributes

Sets the attributes of the platform application object for the supported push notification services, such as APNS and GCM (Firebase Cloud Messaging). For more information, see Using Amazon SNS Mobile Push Notifications. For information on configuring attributes for message delivery status, see Using Amazon SNS Application Attributes for Message Delivery Status.

Request Parameters

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

Attributes , Attributes.entry.N.key (key), Attributes.entry.N.value (value)

> A map of the platform application attributes. Attributes in this map include the following:
>
> - `PlatformCredential` – The credential received from the notification service.
>
>   - For ADM, `PlatformCredential`is client secret.
>
>   - For Apple Services using certificate credentials, `PlatformCredential` is private key.
>
>   - For Apple Services using token credentials, `PlatformCredential` is signing key.
>
>   - For GCM (Firebase Cloud Messaging) using key credentials, there is no `PlatformPrincipal`. The `PlatformCredential` is `API key`.
>
>   - For GCM (Firebase Cloud Messaging) using token credentials, there is no `PlatformPrincipal`. The `PlatformCredential` is a JSON formatted private key file. When using the AWS CLI, the file must be in string format and special characters must be ignored. To format the file correctly, Amazon SNS recommends using the following command: SERVICE_JSON=`jq @json <<< cat service.json`.
>
> - `PlatformPrincipal` – The principal received from the notification service.
>
>   - For ADM, `PlatformPrincipal`is client id.
>
>   - For Apple Services using certificate credentials, `PlatformPrincipal` is SSL certificate.
>
>   - For Apple Services using token credentials, `PlatformPrincipal` is signing key ID.
>
>   - For GCM (Firebase Cloud Messaging), there is no `PlatformPrincipal`.
>
> - `EventEndpointCreated` – Topic ARN to which `EndpointCreated` event notifications are sent.
>
> - `EventEndpointDeleted` – Topic ARN to which `EndpointDeleted` event notifications are sent.

- `EventEndpointUpdated` – Topic ARN to which `EndpointUpdate` event notifications are sent.

- `EventDeliveryFailure` – Topic ARN to which `DeliveryFailure` event notifications are sent upon Direct Publish delivery failure (permanent) to one of the application's endpoints.

- `SuccessFeedbackRoleArn` – IAM role ARN used to give Amazon SNS write access to use CloudWatch Logs on your behalf.

- `FailureFeedbackRoleArn` – IAM role ARN used to give Amazon SNS write access to use CloudWatch Logs on your behalf.

- `SuccessFeedbackSampleRate` – Sample rate percentage (0-100) of successfully delivered messages.

The following attributes only apply to APNs token-based authentication:

- `ApplePlatformTeamID` – The identifier that's assigned to your Apple developer account team.

- `ApplePlatformBundleID` – The bundle identifier that's assigned to your iOS app.

Type: String to string map

Required: Yes

PlatformApplicationArn

`PlatformApplicationArn` for `SetPlatformApplicationAttributes` action.

Type: String

Required: Yes

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

NotFound

Indicates that the requested resource does not exist.

HTTP Status Code: 404

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see [Examples of the complete Signature Version 4 signing process (Python)](#) in the *AWS General Reference*.

Example

This example illustrates one usage of SetPlatformApplicationAttributes.

Sample Request

```
https://sns.us-west-2.amazonaws.com/?Action=SetPlatformApplicationAttributes
&Attributes.entry.1.key=EventEndpointCreated&PlatformApplicationArn=arn%3Aaws%3Asns
%3Aus-west-2%3A123456789012%3Aapp%2FGCM%2Fgcmpushapp
&Attributes.entry.1.value=arn%3Aaws%3Asns%3Aus-west-2%3A123456789012%3Atopicarn
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<SetPlatformApplicationAttributesResponse xmlns="https://sns.amazonaws.com/
doc/2010-03-31/">
    <ResponseMetadata>
        <RequestId>cf577bcc-b3dc-5463-88f1-3180b9412395</RequestId>
    </ResponseMetadata>
</SetPlatformApplicationAttributesResponse>
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

SetSMSAttributes

Use this request to set the default settings for sending SMS messages and receiving daily SMS usage reports.

You can override some of these settings for a single message when you use the `Publish` action with the `MessageAttributes.entry.N` parameter. For more information, see [Publishing to a mobile phone](#) in the *Amazon SNS Developer Guide*.

> ⓘ **Note**
>
> To use this operation, you must grant the Amazon SNS service principal (`sns.amazonaws.com`) permission to perform the `s3:ListBucket` action.

Request Parameters

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

attributes , attributes.entry.N.key (key), attributes.entry.N.value (value)

The default settings for sending SMS messages from your AWS account. You can set values for the following attribute names:

`MonthlySpendLimit` – The maximum amount in USD that you are willing to spend each month to send SMS messages. When Amazon SNS determines that sending an SMS message would incur a cost that exceeds this limit, it stops sending SMS messages within minutes.

> ⚠ **Important**
>
> Amazon SNS stops sending SMS messages within minutes of the limit being crossed. During that interval, if you continue to send SMS messages, you will incur costs that exceed your limit.

By default, the spend limit is set to the maximum allowed by Amazon SNS. If you want to raise the limit, submit an [SNS Limit Increase case](#). For **New limit value**, enter your desired monthly spend limit. In the **Use Case Description** field, explain that you are requesting an SMS monthly spend limit increase.

`DeliveryStatusIAMRole` – The ARN of the IAM role that allows Amazon SNS to write logs about SMS deliveries in CloudWatch Logs. For each SMS message that you send, Amazon SNS writes a log that includes the message price, the success or failure status, the reason for failure (if the message failed), the message dwell time, and other information.

`DeliveryStatusSuccessSamplingRate` – The percentage of successful SMS deliveries for which Amazon SNS will write logs in CloudWatch Logs. The value can be an integer from 0 - 100. For example, to write logs only for failed deliveries, set this value to 0. To write logs for 10% of your successful deliveries, set it to 10.

`DefaultSenderID` – A string, such as your business brand, that is displayed as the sender on the receiving device. Support for sender IDs varies by country. The sender ID can be 1 - 11 alphanumeric characters, and it must contain at least one letter.

`DefaultSMSType` – The type of SMS message that you will send by default. You can assign the following values:

- `Promotional` – (Default) Noncritical messages, such as marketing messages. Amazon SNS optimizes the message delivery to incur the lowest cost.

- `Transactional` – Critical messages that support customer transactions, such as one-time passcodes for multi-factor authentication. Amazon SNS optimizes the message delivery to achieve the highest reliability.

`UsageReportS3Bucket` – The name of the Amazon S3 bucket to receive daily SMS usage reports from Amazon SNS. Each day, Amazon SNS will deliver a usage report as a CSV file to the bucket. The report includes the following information for each SMS message that was successfully delivered by your AWS account:

- Time that the message was published (in UTC)

- Message ID

- Destination phone number

- Message type

- Delivery status

- Message price (in USD)

- Part number (a message is split into multiple parts if it is too long for a single message)

- Total number of parts

To receive the report, the bucket must have a policy that allows the Amazon SNS service principal to perform the `s3:PutObject` and `s3:GetBucketLocation` actions.

For an example bucket policy and usage report, see [Monitoring SMS Activity](#) in the *Amazon SNS Developer Guide*.

Type: String to string map

Required: Yes

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

Throttled

Indicates that the rate at which requests have been submitted for this action exceeds the limit for your Amazon Web Services account.

message

Throttled request.

HTTP Status Code: 429

Examples

Example policy

You can use the following example policy to provide permission for the Amazon SNS service principal to run the `s3:ListBucket` action. Replace `amzn-s3-demo-bucket` with the S3 bucket you specified in the `UsageReportS3Bucket` parameter.

```
{
  "Version": "2008-10-17",
  "Statement": [{
          "Sid": "AllowListBucket",
          "Effect": "Allow",
          "Principal": {
              "Service": "sns.amazonaws.com"
          },
          "Action": "s3:ListBucket",
          "Resource": "arn:aws:s3:::amzn-s3-demo-bucket"
      }]
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

SetSubscriptionAttributes

Allows a subscription owner to set an attribute of the subscription to a new value.

Request Parameters

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

AttributeName

A map of attributes with their corresponding values.

The following lists the names, descriptions, and values of the special request parameters that this action uses:

- `DeliveryPolicy` – The policy that defines how Amazon SNS retries failed deliveries to HTTP/S endpoints.

- `FilterPolicy` – The simple JSON object that lets your subscriber receive only a subset of messages, rather than receiving every message published to the topic.

- `FilterPolicyScope` – This attribute lets you choose the filtering scope by using one of the following string value types:

  - `MessageAttributes` (default) – The filter is applied on the message attributes.

  - `MessageBody` – The filter is applied on the message body.

- `RawMessageDelivery` – When set to `true`, enables raw message delivery to Amazon SQS or HTTP/S endpoints. This eliminates the need for the endpoints to process JSON formatting, which is otherwise created for Amazon SNS metadata.

- `RedrivePolicy` – When specified, sends undeliverable messages to the specified Amazon SQS dead-letter queue. Messages that can't be delivered due to client errors (for example, when the subscribed endpoint is unreachable) or server errors (for example, when the service that powers the subscribed endpoint becomes unavailable) are held in the dead-letter queue for further analysis or reprocessing.

The following attribute applies only to Amazon Data Firehose delivery stream subscriptions:

- `SubscriptionRoleArn` – The ARN of the IAM role that has the following:

  - Permission to write to the Firehose delivery stream

  - Amazon SNS listed as a trusted entity

Specifying a valid ARN for this attribute is required for Firehose delivery stream subscriptions. For more information, see Fanout to Firehose delivery streams in the *Amazon SNS Developer Guide*.

Type: String

Required: Yes

AttributeValue

The new value for the attribute in JSON format.

Type: String

Required: No

SubscriptionArn

The ARN of the subscription to modify.

Type: String

Required: Yes

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

FilterPolicyLimitExceeded

Indicates that the number of filter polices in your AWS account exceeds the limit. To add more filter polices, submit an Amazon SNS Limit Increase case in the AWS Support Center.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

NotFound

Indicates that the requested resource does not exist.

HTTP Status Code: 404

ReplayLimitExceeded

Indicates that the request parameter has exceeded the maximum number of concurrent message replays.

HTTP Status Code: 403

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see Examples of the complete Signature Version 4 signing process (Python) in the *AWS General Reference*.

Example

The following example sets the delivery policy to 5 retries.

The JSON format for `AttributeValue` is as follows. For more information on the `DeliveryPolicy` subscription attribute, see Creating an HTTP/S delivery policy.

```
{
    "healthyRetryPolicy": {
        "minDelayTarget": <int>,
        "maxDelayTarget": <int>,
        "numRetries": <int>,
        "numMaxDelayRetries": <int>,
        "backoffFunction": "<linear|arithmetic|geometric|exponential>"
    },
    "throttlePolicy": {
```

```
        "maxReceivesPerSecond": <int>
    },
    "requestPolicy" : {
        "headerContentType" : "<text/plain | application/json | application/xml>"
    }
}
```

Sample Request

```
https://sns.us-east-2.amazonaws.com/?Action=SetSubscriptionAttributes
&SubscriptionArn=arn%3Aaws%3Asns%3Aus-east-2%3A123456789012%3AMy-Topic
%3A80289ba6-0fd4-4079-afb4-ce8c8260f0ca
&AttributeName=DeliveryPolicy
&AttributeValue={"healthyRetryPolicy":{"numRetries":5}}
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<SetSubscriptionAttributesResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <ResponseMetadata>
        <RequestId>a8763b99-33a7-11df-a9b7-05d48da6f042</RequestId>
    </ResponseMetadata>
</SetSubscriptionAttributesResponse>
```

See Also

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

- AWS Command Line Interface V2

- AWS SDK for .NET V4

- AWS SDK for C++

- AWS SDK for Go v2

- AWS SDK for Java V2

- AWS SDK for JavaScript V3

- AWS SDK for Kotlin

- AWS SDK for PHP V3

- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

SetTopicAttributes

Allows a topic owner to set an attribute of the topic to a new value.

> **ⓘ Note**
>
> To remove the ability to change topic permissions, you must deny permissions to the `AddPermission`, `RemovePermission`, and `SetTopicAttributes` actions in your IAM policy.

Request Parameters

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

AttributeName

A map of attributes with their corresponding values.

The following lists the names, descriptions, and values of the special request parameters that the `SetTopicAttributes` action uses:

- `DeliveryPolicy` – The policy that defines how Amazon SNS retries failed deliveries to HTTP/S endpoints.

- `DisplayName` – The display name to use for a topic with SMS subscriptions.

- `Policy` – The policy that defines who can access your topic. By default, only the topic owner can publish or subscribe to the topic.

- `TracingConfig` – Tracing mode of an Amazon SNS topic. By default `TracingConfig` is set to `PassThrough`, and the topic passes through the tracing header it receives from an Amazon SNS publisher to its subscriptions. If set to `Active`, Amazon SNS will vend X-Ray segment data to topic owner account if the sampled flag in the tracing header is true. This is only supported on standard topics.

- HTTP

  - `HTTPSuccessFeedbackRoleArn` – Indicates successful message delivery status for an Amazon SNS topic that is subscribed to an HTTP endpoint.

  - `HTTPSuccessFeedbackSampleRate` – Indicates percentage of successful messages to sample for an Amazon SNS topic that is subscribed to an HTTP endpoint.

- `HTTPFailureFeedbackRoleArn` – Indicates failed message delivery status for an Amazon SNS topic that is subscribed to an HTTP endpoint.

- Amazon Data Firehose

  - `FirehoseSuccessFeedbackRoleArn` – Indicates successful message delivery status for an Amazon SNS topic that is subscribed to an Amazon Data Firehose endpoint.

  - `FirehoseSuccessFeedbackSampleRate` – Indicates percentage of successful messages to sample for an Amazon SNS topic that is subscribed to an Amazon Data Firehose endpoint.

  - `FirehoseFailureFeedbackRoleArn` – Indicates failed message delivery status for an Amazon SNS topic that is subscribed to an Amazon Data Firehose endpoint.

- AWS Lambda

  - `LambdaSuccessFeedbackRoleArn` – Indicates successful message delivery status for an Amazon SNS topic that is subscribed to an AWS Lambda endpoint.

  - `LambdaSuccessFeedbackSampleRate` – Indicates percentage of successful messages to sample for an Amazon SNS topic that is subscribed to an AWS Lambda endpoint.

  - `LambdaFailureFeedbackRoleArn` – Indicates failed message delivery status for an Amazon SNS topic that is subscribed to an AWS Lambda endpoint.

- Platform application endpoint

  - `ApplicationSuccessFeedbackRoleArn` – Indicates successful message delivery status for an Amazon SNS topic that is subscribed to an platform application endpoint.

  - `ApplicationSuccessFeedbackSampleRate` – Indicates percentage of successful messages to sample for an Amazon SNS topic that is subscribed to an platform application endpoint.

  - `ApplicationFailureFeedbackRoleArn` – Indicates failed message delivery status for an Amazon SNS topic that is subscribed to an platform application endpoint.

    > ⓘ **Note**
    >
    > In addition to being able to configure topic attributes for message delivery status of notification messages sent to Amazon SNS application endpoints, you can also configure application attributes for the delivery status of push notification messages sent to push notification services.

> For example, For more information, see [Using Amazon SNS Application Attributes for Message Delivery Status](#).

- Amazon SQS

  - `SQSSuccessFeedbackRoleArn` – Indicates successful message delivery status for an Amazon SNS topic that is subscribed to an Amazon SQS endpoint.

  - `SQSSuccessFeedbackSampleRate` – Indicates percentage of successful messages to sample for an Amazon SNS topic that is subscribed to an Amazon SQS endpoint.

  - `SQSFailureFeedbackRoleArn` – Indicates failed message delivery status for an Amazon SNS topic that is subscribed to an Amazon SQS endpoint.

> ⓘ **Note**
>
> The <ENDPOINT>SuccessFeedbackRoleArn and <ENDPOINT>FailureFeedbackRoleArn attributes are used to give Amazon SNS write access to use CloudWatch Logs on your behalf. The <ENDPOINT>SuccessFeedbackSampleRate attribute is for specifying the sample rate percentage (0-100) of successfully delivered messages. After you configure the <ENDPOINT>FailureFeedbackRoleArn attribute, then all failed message deliveries generate CloudWatch Logs.

The following attribute applies only to [server-side-encryption](#):

- `KmsMasterKeyId` – The ID of an AWS managed customer master key (CMK) for Amazon SNS or a custom CMK. For more information, see [Key Terms](#). For more examples, see [KeyId](#) in the *AWS Key Management Service API Reference*.

- `SignatureVersion` – The signature version corresponds to the hashing algorithm used while creating the signature of the notifications, subscription confirmations, or unsubscribe confirmation messages sent by Amazon SNS. By default, `SignatureVersion` is set to 1.

The following attribute applies only to [FIFO topics](#):

- `ArchivePolicy` – The policy that sets the retention period for messages stored in the message archive of an Amazon SNS FIFO topic.

- `ContentBasedDeduplication` – Enables content-based deduplication for FIFO topics.

  - By default, `ContentBasedDeduplication` is set to `false`. If you create a FIFO topic and this attribute is `false`, you must specify a value for the `MessageDeduplicationId` parameter for the [Publish](#) action.

- When you set `ContentBasedDeduplication` to `true`, Amazon SNS uses a SHA-256 hash to generate the `MessageDeduplicationId` using the body of the message (but not the attributes of the message).

  (Optional) To override the generated value, you can specify a value for the `MessageDeduplicationId` parameter for the `Publish` action.

- `FifoThroughputScope` – Enables higher throughput for your FIFO topic by adjusting the scope of deduplication. This attribute has two possible values:

  - `Topic` – The scope of message deduplication is across the entire topic. This is the default value and maintains existing behavior, with a maximum throughput of 3000 messages per second or 20MB per second, whichever comes first.

  - `MessageGroup` – The scope of deduplication is within each individual message group, which enables higher throughput per topic subject to regional quotas. For more information on quotas or to request an increase, see Amazon SNS service quotas in the Amazon Web Services General Reference.

  Type: String

  Required: Yes

AttributeValue

  The new value for the attribute.

  Type: String

  Required: No

TopicArn

  The ARN of the topic to modify.

  Type: String

  Required: Yes

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

InvalidSecurity

The credential signature isn't valid. You must use an HTTPS endpoint and sign your request using Signature Version 4.

HTTP Status Code: 403

NotFound

Indicates that the requested resource does not exist.

HTTP Status Code: 404

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see [Examples of the complete Signature Version 4 signing process (Python)](#) in the *AWS General Reference*.

Example

The following example sets the `DisplayName` attribute to `MyTopicName`.

Sample Request

```
https://sns.us-east-2.amazonaws.com/?Action=SetTopicAttributes
 &TopicArn=arn%3Aaws%3Asns%3Aus-east-2%3A123456789012%3AMy-Topic
```

```
&AttributeName=DisplayName
&AttributeValue=MyTopicName
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<SetTopicAttributesResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <ResponseMetadata>
        <RequestId>a8763b99-33a7-11df-a9b7-05d48da6f042</RequestId>
    </ResponseMetadata>
</SetTopicAttributesResponse>
```

Example

The following example sets the delivery policy to 5 retries.

The JSON format for `AttributeValue` is as follows. For more information on the `DeliveryPolicy` topic attribute, see [Creating an HTTP/S delivery policy](#).

```
"http": {
    "defaultHealthyRetryPolicy": {
        "minDelayTarget": <int>,
        "maxDelayTarget": <int>,
        "numRetries": <int>,
        "numMaxDelayRetries": <int>,
        "backoffFunction": "<linear|arithmetic|geometric|exponential>"
    },
    "disableSubscriptionOverrides": <boolean>,
    "defaultThrottlePolicy": {
        "maxReceivesPerSecond": <int>
    },
    "defaultRequestPolicy" : {
        "headerContentType" : "<text/plain | application/json | application/xml>"
    }
}
```

See Also

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

- [AWS Command Line Interface V2](#)

- [AWS SDK for .NET V4](#)

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

- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)

- [AWS SDK for JavaScript V3](#)

- [AWS SDK for Kotlin](#)

- [AWS SDK for PHP V3](#)

- [AWS SDK for Python](#)

- [AWS SDK for Ruby V3](#)

Subscribe

Subscribes an endpoint to an Amazon SNS topic. If the endpoint type is HTTP/S or email, or if the endpoint and the topic are not in the same AWS account, the endpoint owner must run the `ConfirmSubscription` action to confirm the subscription.

You call the `ConfirmSubscription` action with the token from the subscription response. Confirmation tokens are valid for two days.

This action is throttled at 100 transactions per second (TPS).

Request Parameters

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

Attributes , Attributes.entry.N.key (key), Attributes.entry.N.value (value)

A map of attributes with their corresponding values.

The following lists the names, descriptions, and values of the special request parameters that the `Subscribe` action uses:

- `DeliveryPolicy` – The policy that defines how Amazon SNS retries failed deliveries to HTTP/S endpoints.
- `FilterPolicy` – The simple JSON object that lets your subscriber receive only a subset of messages, rather than receiving every message published to the topic.
- `FilterPolicyScope` – This attribute lets you choose the filtering scope by using one of the following string value types:
  - `MessageAttributes` (default) – The filter is applied on the message attributes.
  - `MessageBody` – The filter is applied on the message body.
- `RawMessageDelivery` – When set to `true`, enables raw message delivery to Amazon SQS or HTTP/S endpoints. This eliminates the need for the endpoints to process JSON formatting, which is otherwise created for Amazon SNS metadata.
- `RedrivePolicy` – When specified, sends undeliverable messages to the specified Amazon SQS dead-letter queue. Messages that can't be delivered due to client errors (for example, when the subscribed endpoint is unreachable) or server errors (for example, when the service that powers the subscribed endpoint becomes unavailable) are held in the dead-letter queue for further analysis or reprocessing.

The following attribute applies only to Amazon Data Firehose delivery stream subscriptions:

- `SubscriptionRoleArn` – The ARN of the IAM role that has the following:

    - Permission to write to the Firehose delivery stream

    - Amazon SNS listed as a trusted entity

    Specifying a valid ARN for this attribute is required for Firehose delivery stream subscriptions. For more information, see Fanout to Firehose delivery streams in the *Amazon SNS Developer Guide*.

The following attributes apply only to FIFO topics:

- `ReplayPolicy` – Adds or updates an inline policy document for a subscription to replay messages stored in the specified Amazon SNS topic.

- `ReplayStatus` – Retrieves the status of the subscription message replay, which can be one of the following:

    - `Completed` – The replay has successfully redelivered all messages, and is now delivering newly published messages. If an ending point was specified in the `ReplayPolicy` then the subscription will no longer receive newly published messages.

    - `In progress` – The replay is currently replaying the selected messages.

    - `Failed` – The replay was unable to complete.

    - `Pending` – The default state while the replay initiates.

Type: String to string map

Required: No

Endpoint

The endpoint that you want to receive notifications. Endpoints vary by protocol:

- For the `http` protocol, the (public) endpoint is a URL beginning with `http://`.

- For the `https` protocol, the (public) endpoint is a URL beginning with `https://`.

- For the `email` protocol, the endpoint is an email address.

- For the `email-json` protocol, the endpoint is an email address.

- For the `sms` protocol, the endpoint is a phone number of an SMS-enabled device.

- For the `sqs` protocol, the endpoint is the ARN of an Amazon SQS queue.

- For the `application` protocol, the endpoint is the EndpointArn of a mobile app and device.

- For the `lambda` protocol, the endpoint is the ARN of an AWS Lambda function.

- For the `firehose` protocol, the endpoint is the ARN of an Amazon Data Firehose delivery stream.

Type: String

Required: No

Protocol

The protocol that you want to use. Supported protocols include:

- `http` – delivery of JSON-encoded message via HTTP POST
- `https` – delivery of JSON-encoded message via HTTPS POST
- `email` – delivery of message via SMTP
- `email-json` – delivery of JSON-encoded message via SMTP
- `sms` – delivery of message via SMS
- `sqs` – delivery of JSON-encoded message to an Amazon SQS queue
- `application` – delivery of JSON-encoded message to an EndpointArn for a mobile app and device
- `lambda` – delivery of JSON-encoded message to an AWS Lambda function
- `firehose` – delivery of JSON-encoded message to an Amazon Data Firehose delivery stream.

Type: String

Required: Yes

ReturnSubscriptionArn

Sets whether the response from the `Subscribe` request includes the subscription ARN, even if the subscription is not yet confirmed.

If you set this parameter to `true`, the response includes the ARN in all cases, even if the subscription is not yet confirmed. In addition to the ARN for confirmed subscriptions, the response also includes the `pending subscription` ARN value for subscriptions that aren't yet confirmed. A subscription becomes confirmed when the subscriber calls the `ConfirmSubscription` action with a confirmation token.

The default value is `false`.

Type: Boolean

Required: No

TopicArn

The ARN of the topic you want to subscribe to.

Type: String

Required: Yes

Response Elements

The following element is returned by the service.

SubscriptionArn

The ARN of the subscription if it is confirmed, or the string "pending confirmation" if the subscription requires confirmation. However, if the API request parameter `ReturnSubscriptionArn` is true, then the value is always the subscription ARN, even if the subscription requires confirmation.

Type: String

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

FilterPolicyLimitExceeded

Indicates that the number of filter polices in your AWS account exceeds the limit. To add more filter polices, submit an Amazon SNS Limit Increase case in the AWS Support Center.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

InvalidSecurity

The credential signature isn't valid. You must use an HTTPS endpoint and sign your request using Signature Version 4.

HTTP Status Code: 403

NotFound

Indicates that the requested resource does not exist.

HTTP Status Code: 404

ReplayLimitExceeded

Indicates that the request parameter has exceeded the maximum number of concurrent message replays.

HTTP Status Code: 403

SubscriptionLimitExceeded

Indicates that the customer already owns the maximum allowed number of subscriptions.

HTTP Status Code: 403

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see Examples of the complete Signature Version 4 signing process (Python) in the *AWS General Reference*.

Example of an Amazon SQS subscription

The following example Query request subscribes an Amazon SQS queue to an SNS topic. For more information, see Subscribe Queue to Amazon SNS Topic in the *Amazon SQS Developer Guide*.

Sample Request

```
https://sns.us-west-2.amazonaws.com/?Action=Subscribe
&TopicArn=arn%3Aaws%3Asns%3Aus-west-2%3A123456789012%3AMyTopic
&Endpoint=arn%3Aaws%3Asqs%3Aus-west-2%3A123456789012%3AMyQueue
&Protocol=sqs
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<SubscribeResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <SubscribeResult>
        <SubscriptionArn>arn:aws:sns:us-
west-2:123456789012:MyTopic:6b0e71bd-7e97-4d97-80ce-4a0994e55286</SubscriptionArn>
    </SubscribeResult>
    <ResponseMetadata>
        <RequestId>c4407779-24a4-56fa-982c-3d927f93a775</RequestId>
    </ResponseMetadata>
</SubscribeResponse>
```

Example of an Amazon Data Firehose delivery stream subscription

This example illustrates one usage of Subscribe.

Sample Request

```
https://sns.us-west-2.amazonaws.com/?Action=Subscribe
&TopicArn=arn:aws:sns:us-west-2:123456789012:MyTopic
&Endpoint=arn:aws:firehose:us-west-2:123456789012:deliverystream/MyStream
&Protocol=firehose
&Attributes.entry.1.key=SubscriptionRoleArn
&Attributes.entry.1.value=arn:aws:iam::123456789012:role/FirehoseRoleArn
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<SubscribeResponse xmlns="http://sns.amazonaws.com/doc/2010-03-31/">
    <SubscribeResult>
        <SubscriptionArn>
```

```
            arn:aws:sns:us-west-2:123456789012:MyTopic:
            6b0e71bd-7e97-4d97-80ce-4a0994e55286
        </SubscriptionArn>
    </SubscribeResult>
    <ResponseMetadata>
        <RequestId>c4407779-24a4-56fa-982c-3d927f93a775</RequestId>
    </ResponseMetadata>
</SubscribeResponse>
```

See Also

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

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

TagResource

Add tags to the specified Amazon SNS topic. For an overview, see Amazon SNS Tags in the *Amazon SNS Developer Guide*.

When you use topic tags, keep the following guidelines in mind:

- Adding more than 50 tags to a topic isn't recommended.
- Tags don't have any semantic meaning. Amazon SNS interprets tags as character strings.
- Tags are case-sensitive.
- A new tag with a key identical to that of an existing tag overwrites the existing tag.
- Tagging actions are limited to 10 TPS per AWS account, per AWS Region. If your application requires a higher throughput, file a technical support request.

Request Parameters

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

ResourceArn

 The ARN of the topic to which to add tags.

 Type: String

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

 Required: Yes

Tags.member.N

 The tags to be added to the specified topic. A tag consists of a required key and an optional value.

 Type: Array of Tag objects

 Required: Yes

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

ConcurrentAccess

Can't perform multiple operations on a tag simultaneously. Perform the operations sequentially.

HTTP Status Code: 400

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

ResourceNotFound

Can't perform the action on the specified resource. Make sure that the resource exists.

HTTP Status Code: 404

StaleTag

A tag has been added to a resource with the same ARN as a deleted resource. Wait a short while and then retry the operation.

HTTP Status Code: 400

TagLimitExceeded

Can't add more than 50 tags to a topic.

HTTP Status Code: 400

TagPolicy

The request doesn't comply with the IAM tag policy. Correct your request and then retry it.

HTTP Status Code: 400

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see [Examples of the complete Signature Version 4 signing process (Python)](#) in the *AWS General Reference*.

Example

This example illustrates one usage of TagResource.

Sample Request

```
http://sns.us-west-2.amazonaws.com/?&Action=TagResource
&ResourceArn=arn%3Aaws%3Asns%3Aus-west-2%3A123456789012%3Atagging
&Tags.Tag.1.Key=tagKey
&Tags.Tag.1.Value=tagValue
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<TagResourceResponse>
    <TagResourceResult/>
    <ResponseMetadata>
        <RequestId>a1b2c3de-fg45-67h8-i9j0-k1lm234n5678</RequestId>
    </ResponseMetadata>
</TagResourceResponse>
```

See Also

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

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)

- [AWS SDK for Kotlin](#)

- [AWS SDK for PHP V3](#)

- [AWS SDK for Python](#)

- [AWS SDK for Ruby V3](#)

Unsubscribe

Deletes a subscription. If the subscription requires authentication for deletion, only the owner of the subscription or the topic's owner can unsubscribe, and an AWS signature is required. If the `Unsubscribe` call does not require authentication and the requester is not the subscription owner, a final cancellation message is delivered to the endpoint, so that the endpoint owner can easily resubscribe to the topic if the `Unsubscribe` request was unintended.

This action is throttled at 100 transactions per second (TPS).

Request Parameters

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

SubscriptionArn

The ARN of the subscription to be deleted.

Type: String

Required: Yes

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

InvalidSecurity

The credential signature isn't valid. You must use an HTTPS endpoint and sign your request using Signature Version 4.

HTTP Status Code: 403

NotFound

Indicates that the requested resource does not exist.

HTTP Status Code: 404

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see [Examples of the complete Signature Version 4 signing process (Python)](#) in the *AWS General Reference*.

Example

This example illustrates one usage of Unsubscribe.

Sample Request

```
https://sns.us-east-2.amazonaws.com/?Action=Unsubscribe
&SubscriptionArn=arn%3Aaws%3Asns%3Aus-east-2%3A123456789012%3AMy-Topic
%3A80289ba6-0fd4-4079-afb4-ce8c8260f0ca
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<UnsubscribeResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <ResponseMetadata>
        <RequestId>18e0ac39-3776-11df-84c0-b93cc1666b84</RequestId>
    </ResponseMetadata>
</UnsubscribeResponse>
```

See Also

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

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

UntagResource

Remove tags from the specified Amazon SNS topic. For an overview, see [Amazon SNS Tags](#) in the *Amazon SNS Developer Guide*.

Request Parameters

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

ResourceArn

The ARN of the topic from which to remove tags.

Type: String

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

Required: Yes

TagKeys.member.N

The list of tag keys to remove from the specified topic.

Type: Array of strings

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

Required: Yes

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

ConcurrentAccess

Can't perform multiple operations on a tag simultaneously. Perform the operations sequentially.

HTTP Status Code: 400

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

ResourceNotFound

Can't perform the action on the specified resource. Make sure that the resource exists.

HTTP Status Code: 404

StaleTag

A tag has been added to a resource with the same ARN as a deleted resource. Wait a short while and then retry the operation.

HTTP Status Code: 400

TagLimitExceeded

Can't add more than 50 tags to a topic.

HTTP Status Code: 400

TagPolicy

The request doesn't comply with the IAM tag policy. Correct your request and then retry it.

HTTP Status Code: 400

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see Examples of the complete Signature Version 4 signing process (Python) in the *AWS General Reference*.

Example

This example illustrates one usage of UntagResource.

Sample Request

```
http://sns.us-east-2.amazonaws.com/?Action=UntagResource
```

```
&ResourceArn=arn%3Aaws%3Asns%3Aus-east-1%3A123456789012%3Atagging
&TagKeys.TagKey.1=tagKey
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<UntagResourceResponse>
    <UntagResourceResult/>
    <ResponseMetadata>
        <RequestId>1a34f567-8bc9-01de-f234-g567h8908i12</RequestId>
    </ResponseMetadata>
</UntagResourceResponse>
```

See Also

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

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

VerifySMSSandboxPhoneNumber

Verifies a destination phone number with a one-time password (OTP) for the calling AWS account.

When you start using Amazon SNS to send SMS messages, your AWS account is in the *SMS sandbox*. The SMS sandbox provides a safe environment for you to try Amazon SNS features without risking your reputation as an SMS sender. While your AWS account is in the SMS sandbox, you can use all of the features of Amazon SNS. However, you can send SMS messages only to verified destination phone numbers. For more information, including how to move out of the sandbox to send messages without restrictions, see [SMS sandbox](#) in the *Amazon SNS Developer Guide*.

Request Parameters

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

OneTimePassword

The OTP sent to the destination number from the `CreateSMSSandBoxPhoneNumber` call.

Type: String

Length Constraints: Minimum length of 5. Maximum length of 8.

Pattern: `^[0-9]+$`

Required: Yes

PhoneNumber

The destination phone number to verify.

Type: String

Length Constraints: Maximum length of 20.

Pattern: `^(\+[0-9]{8,}|[0-9]{0,9})$`

Required: Yes

Errors

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

AuthorizationError

Indicates that the user has been denied access to the requested resource.

HTTP Status Code: 403

InternalError

Indicates an internal service error.

HTTP Status Code: 500

InvalidParameter

Indicates that a request parameter does not comply with the associated constraints.

HTTP Status Code: 400

ResourceNotFound

Can't perform the action on the specified resource. Make sure that the resource exists.

HTTP Status Code: 404

Throttled

Indicates that the rate at which requests have been submitted for this action exceeds the limit for your Amazon Web Services account.

message

Throttled request.

HTTP Status Code: 429

Verification

Indicates that the one-time password (OTP) used for verification is invalid.

Status

The status of the verification error.

HTTP Status Code: 400

Examples

The structure of AUTHPARAMS depends on the signature of the API request. For more information, see [Examples of the complete Signature Version 4 signing process (Python)](#) in the *AWS General Reference*.

Example

This example illustrates one usage of VerifySMSSandboxPhoneNumber.

Sample Request

```
https://sns.us-west-2.amazonaws.com/?Action=VerifySMSSandboxPhoneNumber
&PhoneNumber=%2B12065550100
&OneTimePassword=7973610
&Version=2010-03-31
&AUTHPARAMS
```

Sample Response

```
<VerifySMSSandboxPhoneNumberResponse xmlns="https://sns.amazonaws.com/doc/2010-03-31/">
    <VerifySMSSandboxPhoneNumberResult>
    </VerifySMSSandboxPhoneNumberResult>
    <ResponseMetadata>
        <RequestId>65e432d1-b1bf-5d5f-a962-6a2b5b4c5c94</RequestId>
    </ResponseMetadata>
</VerifySMSSandboxPhoneNumberResponse>
```

See Also

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

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)

- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

Reference: API actions by category

Common actions

- [Publish](#)

- [PublishBatch](#)

Application-to-application (A2A) actions

- [AddPermission](#)

- [ConfirmSubscription](#)

- [CreateTopic](#)

- [DeleteTopic](#)

- [GetDataProtectionPolicy](#)

- [GetSubscriptionAttributes](#)

- [GetTopicAttributes](#)

- [ListSubscriptions](#)

- [ListSubscriptionsByTopic](#)

- [ListTagsForResource](#)

- [ListTopics](#)

- [PutDataProtectionPolicy](#)

- [RemovePermission](#)

- [SetSubscriptionAttributes](#)

- [SetTopicAttributes](#)

- [Subscribe](#)

- [TagResource](#)

- [Unsubscribe](#)

- [UntagResource](#)

Application-to-person (A2P) actions

Mobile text messaging (SMS)

- CheckIfPhoneNumberIsOptedOut
- CreateSMSSandboxPhoneNumber
- DeleteSMSSandboxPhoneNumber
- GetSMSAttributes
- GetSMSSandboxAccountStatus
- ListOriginationNumbers
- ListPhoneNumbersOptedOut
- ListSMSSandboxPhoneNumbers
- OptInPhoneNumber
- SetSMSAttributes
- VerifySMSSandboxPhoneNumber

Mobile push notifications

- CreatePlatformApplication
- CreatePlatformEndpoint
- DeleteEndpoint
- DeletePlatformApplication
- GetEndpointAttributes
- GetPlatformApplicationAttributes
- ListEndpointsByPlatformApplication
- ListPlatformApplications
- SetEndpointAttributes
- SetPlatformApplicationAttributes

Data Types

The Amazon Simple Notification Service 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:

- [BatchResultErrorEntry](#)
- [Endpoint](#)
- [MessageAttributeValue](#)
- [PhoneNumberInformation](#)
- [PlatformApplication](#)
- [PublishBatchRequestEntry](#)
- [PublishBatchResultEntry](#)
- [SMSSandboxPhoneNumber](#)
- [Subscription](#)
- [Tag](#)
- [Topic](#)

BatchResultErrorEntry

Gives a detailed description of failed messages in the batch.

Contents

Code

An error code representing why the action failed on this entry.

Type: String

Required: Yes

Id

The Id of an entry in a batch request

Type: String

Required: Yes

SenderFault

Specifies whether the error happened due to the caller of the batch API action.

Type: Boolean

Required: Yes

Message

A message explaining why the action failed on this entry.

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

Endpoint

The endpoint for mobile app and device.

Contents

Attributes , Attributes.entry.N.key (key) , Attributes.entry.N.value (value)

Attributes for endpoint.

Type: String to string map

Required: No

EndpointArn

The `EndpointArn` for mobile app and device.

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

MessageAttributeValue

The user-specified message attribute value. For string data types, the value attribute has the same restrictions on the content as the message body. For more information, see Publish.

Name, type, and value must not be empty or null. In addition, the message body should not be empty or null. All parts of the message attribute, including name, type, and value, are included in the message size restriction, which is currently 256 KB (262,144 bytes). For more information, see Amazon SNS message attributes and Publishing to a mobile phone in the *Amazon SNS Developer Guide.*

Contents

DataType

Amazon SNS supports the following logical data types: String, String.Array, Number, and Binary. For more information, see Message Attribute Data Types.

Type: String

Required: Yes

BinaryValue

Binary type attributes can store any binary data, for example, compressed data, encrypted data, or images.

Type: Base64-encoded binary data object

Required: No

StringValue

Strings are Unicode with UTF8 binary encoding. For a list of code values, see ASCII Printable Characters.

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

PhoneNumberInformation

A list of phone numbers and their metadata.

Contents

CreatedAt

The date and time when the phone number was created.

Type: Timestamp

Required: No

Iso2CountryCode

The two-character code for the country or region, in ISO 3166-1 alpha-2 format.

Type: String

Length Constraints: Maximum length of 2.

Pattern: `^[A-Za-z]{2}$`

Required: No

NumberCapabilities.member.N

The capabilities of each phone number.

Type: Array of strings

Valid Values: `SMS | MMS | VOICE`

Required: No

PhoneNumber

The phone number.

Type: String

Required: No

RouteType

The list of supported routes.

Type: String

Valid Values: `Transactional | Promotional | Premium`

Required: No

Status

The status of the phone number.

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

PlatformApplication

Platform application object.

Contents

Attributes , Attributes.entry.N.key (key) , Attributes.entry.N.value (value)

Attributes for platform application object.

Type: String to string map

Required: No

PlatformApplicationArn

PlatformApplicationArn for platform application object.

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

PublishBatchRequestEntry

Contains the details of a single Amazon SNS message along with an `Id` that identifies a message within the batch.

Contents

Id

An identifier for the message in this batch.

> **ⓘ Note**
>
> The `Ids` of a batch request must be unique within a request.
> This identifier can have up to 80 characters. The following characters are accepted: alphanumeric characters, hyphens(-), and underscores (_).

Type: String

Required: Yes

Message

The body of the message.

Type: String

Required: Yes

MessageAttributes , MessageAttributes.entry.N.Name (key) , MessageAttributes.entry.N.Value (value)

Each message attribute consists of a `Name`, `Type`, and `Value`. For more information, see [Amazon SNS message attributes](#) in the Amazon SNS Developer Guide.

Type: String to [MessageAttributeValue](#) object map

Required: No

MessageDeduplicationId

This parameter applies only to FIFO (first-in-first-out) topics.

- This parameter applies only to FIFO (first-in-first-out) topics. The `MessageDeduplicationId` can contain up to 128 alphanumeric characters (`a-z`, `A-Z`, `0-9`) and punctuation (`!"#$%&'()*+,-./:;<=>?@[\]^_`{|}~`).

- Every message must have a unique `MessageDeduplicationId`, which is a token used for deduplication of sent messages within the 5 minute minimum deduplication interval.

- The scope of deduplication depends on the `FifoThroughputScope` attribute, when set to `Topic` the message deduplication scope is across the entire topic, when set to `MessageGroup` the message deduplication scope is within each individual message group.

- If a message with a particular `MessageDeduplicationId` is sent successfully, subsequent messages within the deduplication scope and interval, with the same `MessageDeduplicationId`, are accepted successfully but aren't delivered.

- Every message must have a unique `MessageDeduplicationId`.

  - You may provide a `MessageDeduplicationId` explicitly.

  - If you aren't able to provide a `MessageDeduplicationId` and you enable `ContentBasedDeduplication` for your topic, Amazon SNS uses a SHA-256 hash to generate the `MessageDeduplicationId` using the body of the message (but not the attributes of the message).

  - If you don't provide a `MessageDeduplicationId` and the topic doesn't have `ContentBasedDeduplication` set, the action fails with an error.

  - If the topic has a `ContentBasedDeduplication` set, your `MessageDeduplicationId` overrides the generated one.

- When `ContentBasedDeduplication` is in effect, messages with identical content sent within the deduplication scope and interval are treated as duplicates and only one copy of the message is delivered.

- If you send one message with `ContentBasedDeduplication` enabled, and then another message with a `MessageDeduplicationId` that is the same as the one generated for the first `MessageDeduplicationId`, the two messages are treated as duplicates, within the deduplication scope and interval, and only one copy of the message is delivered.

> ⓘ **Note**
>
> The `MessageDeduplicationId` is available to the consumer of the message (this can be useful for troubleshooting delivery issues).

> If a message is sent successfully but the acknowledgement is lost and the message is resent with the same `MessageDeduplicationId` after the deduplication interval, Amazon SNS can't detect duplicate messages.
>
> Amazon SNS continues to keep track of the message deduplication ID even after the message is received and deleted.

Type: String

Required: No

MessageGroupId

FIFO topics: The tag that specifies that a message belongs to a specific message group. Messages that belong to the same message group are processed in a FIFO manner (however, messages in different message groups might be processed out of order). To interleave multiple ordered streams within a single topic, use `MessageGroupId` values (for example, session data for multiple users). In this scenario, multiple consumers can process the topic, but the session data of each user is processed in a FIFO fashion. You must associate a non-empty `MessageGroupId` with a message. If you do not provide a `MessageGroupId`, the action fails.

Standard topics: The `MessageGroupId` is optional and is forwarded only to Amazon SQS standard subscriptions to activate [fair queues](). The `MessageGroupId` is not used for, or sent to, any other endpoint types.

The length of `MessageGroupId` is 128 characters.

`MessageGroupId` can contain alphanumeric characters (`a-z, A-Z, 0-9`) and punctuation (`!"#$%&'()*+,-./:;<=>?@[\]^_`{|}~`).

Type: String

Required: No

MessageStructure

Set `MessageStructure` to `json` if you want to send a different message for each protocol. For example, using one publish action, you can send a short message to your SMS subscribers and a longer message to your email subscribers. If you set `MessageStructure` to `json`, the value of the `Message` parameter must:

- be a syntactically valid JSON object; and

- contain at least a top-level JSON key of "default" with a value that is a string.

You can define other top-level keys that define the message you want to send to a specific transport protocol (for example, http).

Type: String

Required: No

Subject

The subject of the batch message.

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

PublishBatchResultEntry

Encloses data related to a successful message in a batch request for topic.

Contents

Id

The `Id` of an entry in a batch request.

Type: String

Required: No

MessageId

An identifier for the message.

Type: String

Required: No

SequenceNumber

This parameter applies only to FIFO (first-in-first-out) topics.

The large, non-consecutive number that Amazon SNS assigns to each message.

The length of `SequenceNumber` is 128 bits. `SequenceNumber` continues to increase for a particular `MessageGroupId`.

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 Java V2

- [AWS SDK for Ruby V3](#)

SMSSandboxPhoneNumber

A verified or pending destination phone number in the SMS sandbox.

When you start using Amazon SNS to send SMS messages, your AWS account is in the *SMS sandbox*. The SMS sandbox provides a safe environment for you to try Amazon SNS features without risking your reputation as an SMS sender. While your AWS account is in the SMS sandbox, you can use all of the features of Amazon SNS. However, you can send SMS messages only to verified destination phone numbers. For more information, including how to move out of the sandbox to send messages without restrictions, see SMS sandbox in the *Amazon SNS Developer Guide*.

Contents

PhoneNumber

The destination phone number.

Type: String

Length Constraints: Maximum length of 20.

Pattern: `^(\+[0-9]{8,}|[0-9]{0,9})$`

Required: No

Status

The destination phone number's verification status.

Type: String

Valid Values: `Pending | Verified`

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

Subscription

A wrapper type for the attributes of an Amazon SNS subscription.

Contents

Endpoint

The subscription's endpoint (format depends on the protocol).

Type: String

Required: No

Owner

The subscription's owner.

Type: String

Required: No

Protocol

The subscription's protocol.

Type: String

Required: No

SubscriptionArn

The subscription's ARN.

Type: String

Required: No

TopicArn

The ARN of the subscription's topic.

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

Tag

The list of tags to be added to the specified topic.

Contents

Key

The required key portion of the tag.

Type: String

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

Required: Yes

Value

The optional value portion of the tag.

Type: String

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

Required: Yes

See Also

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

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

Topic

A wrapper type for the topic's Amazon Resource Name (ARN). To retrieve a topic's attributes, use `GetTopicAttributes`.

Contents

TopicArn

The topic's ARN.

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 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 [Signing AWS API requests](#) in the *IAM User Guide*.

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 Create a signed AWS API request in the *IAM User Guide*.

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 Elements of an AWS API request signature in the *IAM User Guide*.

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 STS, see AWS services that work with IAM in the *IAM User Guide*.

Condition: If you're using temporary security credentials from AWS STS, 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 Create a signed AWS API request in the *IAM User Guide*.

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

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