Amazon Simple Notification Service

API Reference

API Version 2010-03-31

Amazon Simple Notification Service: API Reference

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Welcome

Amazon Simple Notification Service (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 http://aws.amazon.com/sns. For detailed information about Amazon SNS features and their associated API calls, see 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.

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Actions

The following actions are supported:

AddPermission

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 67).

ActionName.member.N

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

Valid values: any Amazon SNS action name.

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 accounts, 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 (p. 69).

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

Example

Example

Sample Request

```
http://sns.us-east-1.amazonaws.com/
      ?TopicArn=arn%3Aaws%3Asns%3Aus-east-1%3A123456789012%3AMy-Test
      &ActionName.member.1=Publish &ActionName.member.2=GetTopicAttributes
      &Label=NewPermission &AWSAccountId.member.1=987654321000
      &AWSAccountId.member.2=876543210000 &Action=AddPermission
&SignatureVersion=2
      &SignatureMethod=HmacSHA256 &Timestamp=2010-03-31T12%3A00%3A00.000Z
      &AWSAccessKeyId=(AWS Access Key ID)
      &Signature=k%2FAU%2FKp13pjndwJ7rr1sZszy6MZMlOhRBCHx1ZaZFiw%3D
```

Sample Response

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

CheckIfPhoneNumberIsOptedOut

Accepts a phone number and indicates whether the phone holder has opted out of receiving SMS messages from your 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 (p. 67).

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 (p. 69).

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 account.

HTTP Status Code: 429

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 (p. 67).

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 (p. 69).

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

SubscriptionLimitExceeded

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

HTTP Status Code: 403

Example

Example

Sample Request

```
https://sns.us-east-1.amazonaws.com/ ?Action=ConfirmSubscription
        &TopicArn=arn:aws:sns:us-east-1:123456789012:My-Topic
        &Token=51b2ff3edb475b7d91550e0ab6edf0c1de2a34e6ebaf6
        c2262a001bcb7e051c43aa00022ceecce70bd2a67b2042da8d8
        eb47fef7a4e4e942d23e7fa56146b9ee35da040b4b8af564cc4
        184a7391c834cb75d75c22981f776ad1ce8805e9bab29da2329
        985337bb8095627907b46c8577c8440556b6f86582a95475802
6f41fc62041c4b3f67b0f5921232b5dae5aaca1
```

Sample Response

```
<ConfirmSubscriptionResponse
        xmlns="http://sns.amazonaws.com/doc/2010-03-31/">
<ConfirmSubscriptionResult>
        <SubscriptionArn>arn:aws:sns:us-east-1:123456789012:My-
Topic:80289ba6-0fd4-4079-afb4-ce8c8260f0ca</SubscriptionArn>
        </ConfirmSubscriptionResult> <ResponseMetadata>
        <RequestId>7a50221f-3774-11df-a9b7-05d48da6f042</RequestId>
        </ResponseMetadata> </ConfirmSubscriptionResponse>
```

CreatePlatformApplication

Creates a platform application object for one of the supported push notification services, such as APNS and GCM, to which devices and mobile apps may register. You must specify PlatformPrincipal and PlatformCredential attributes when using the `CreatePlatformApplication` action. The PlatformPrincipal is received from the notification service. For APNS/APNS_SANDBOX, PlatformPrincipal is "SSL certificate". For GCM, PlatformPrincipal is not applicable. For ADM, PlatformPrincipal is "client id". The PlatformCredential is also received from the notification service. For WNS, PlatformPrincipal is "Package Security Identifier". For MPNS, PlatformPrincipal is "TLS certificate". For Baidu, PlatformPrincipal is "API key".

For APNS/APNS_SANDBOX, PlatformCredential is "private key". For GCM, PlatformCredential is "API key". For ADM, PlatformCredential is "client secret". For WNS, PlatformCredential is "secret key". For MPNS, PlatformCredential is "private key". For Baidu, PlatformCredential is "secret key". The PlatformApplicationArn that is returned when using `CreatePlatformApplication` is then used as an attribute for the `CreatePlatformEndpoint` action. For more information, see Using Amazon SNS Mobile Push Notifications. For more information about obtaining the PlatformPrincipal and PlatformCredential for each of the supported push notification services, see Getting Started with Apple Push Notification Service, Getting Started with Amazon Device Messaging, Getting Started with Baidu Cloud Push, Getting Started with Google Cloud Messaging for Android, Getting Started with MPNS, or Getting Started with WNS.

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 67).

Attributes , Attributes.entry.N.key (key), Attributesentry.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 (Google 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 (p. 69).

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

Example

Example

Sample Request

```
POST http://sns.us-west-2.amazonaws.com/ HTTP/1.1 ...
       Attributes.entry.2.key=PlatformPrincipal &SignatureMethod=HmacSHA256
       &Attributes.entry.1.value=AIzaSyClE2lcV2zEKTLYYo645zfk2jhQPFeyxDo
       &Attributes.entry.2.value=There+is+no+principal+for+GCM
       &AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
       &Signature=82sHzg1Wfbgisw3i%2BHA2OgBmRktsqUKFinknkq3u%2FQ4%3D
       &Timestamp=2013-07-01T15%3A49%3A50.354Z &Name=gcmpushapp
       &Attributes.entry.1.key=PlatformCredential
&Action=CreatePlatformApplication
       &Version=2010-03-31 &SignatureVersion=2 &Platform=GCM
```

Sample Response

```
HTTP/1.1 200 OK ... <CreatePlatformApplicationResponse
       xmlns="http://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>
```

CreatePlatformEndpoint

Creates an endpoint for a device and mobile app on one of the supported push notification services, such as GCM and APNS. `CreatePlatformEndpoint` requires the PlatformApplicationArn that is returned from `CreatePlatformApplication`. The EndpointArn that is returned when using `CreatePlatformEndpoint` can then be used by the `Publish` action 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 (p. 67).

Attributes , Attributes.entry.N.key (key), Attributesentry.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 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 (p. 69).

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

Example

Example

Sample Request

```
POST http://sns.us-west-2.amazonaws.com/ HTTP/1.1 ...
        PlatformApplicationArn=arn%3Aaws%3Asns%3Aus-
west-2%3A123456789012%3Aapp%2FGCM%2Fgcmpushapp
        &Action=CreatePlatformEndpoint &SignatureMethod=HmacSHA256
        &CustomUserData=UserId%3D27576823
 &AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE

 &Token=APA91bGi7fFachkC1xjlqT66VYEucGHochmf1VQAr9k...jsM0PKPxKhddCzx6paEsyay9Zn3D4wNUJb8m6
        &SignatureVersion=2 &Version=2010-03-31
        &Signature=Rg5vXBS6OfgPtWkt1u32p1w14uiGh%2BKOicvXNWTEz2w%3D
        &Timestamp=2013-07-01T15%3A49%3A50.598Z
```

Sample Response

```
 HTTP/1.1 200 OK ... <CreatePlatformEndpointResponse
        xmlns="http://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>
```

CreateTopic

Creates a topic to which notifications can be published. Users can create at most 100,000 topics. For more information, see http://aws.amazon.com/sns. 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 (p. 67).

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.
>
> Type: String
>
> Required: Yes

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 (p. 69).

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

TopicLimitExceeded
> Indicates that the customer already owns the maximum allowed number of topics.
>
> HTTP Status Code: 403

Example

Example

Sample Request

```
http://sns.us-east-1.amazonaws.com/ ?Name=My-Topic &Action=CreateTopic
    &SignatureVersion=2 &SignatureMethod=HmacSHA256
```

```
        &Timestamp=2010-03-31T12%3A00%3A00.000Z &AWSAccessKeyId=(AWS Access
Key ID)
        &Signature=gfzIF53exFVdpSNb8AiwN3Lv%2FNYXh6S%2Br3yySK70oX4%3D
```

Sample Response

```
<CreateTopicResponse xmlns="http://sns.amazonaws.com/doc/2010-03-31/">
        <CreateTopicResult>
        <TopicArn>arn:aws:sns:us-east-1:123456789012:My-Topic</TopicArn>
        </CreateTopicResult> <ResponseMetadata>
        <RequestId>a8dec8b3-33a4-11df-8963-01868b7c937a</RequestId>
        </ResponseMetadata> </CreateTopicResponse>
```

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 (p. 67).

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 (p. 69).

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

Example

Example

Sample Request

```
POST http://sns.us-west-2.amazonaws.com/ HTTP/1.1 ... Action=DeleteEndpoint
        &SignatureMethod=HmacSHA256 &AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
        &EndpointArn=arn%3Aaws%3Asns%3Aus-west-2%3A123456789012%3Aendpoint
%2FGCM%2Fgcmpushapp%2F5e3e9847-3183-3f18-a7e8-671c3a57d4b3
        &SignatureVersion=2 &Version=2010-03-31
        &Signature=LIc6GI3JbNhmHBEDmSxzZp648XPe5CMeFny%2BTQFtomQ%3D
        &Timestamp=2013-07-01T23%3A00%3A12.456Z
```

Sample Response

```
HTTP/1.1 200 OK ... <DeleteEndpointResponse
        xmlns="http://sns.amazonaws.com/doc/2010-03-31/"> <ResponseMetadata>
        <RequestId>c1d2b191-353c-5a5f-8969-fbdd3900afa8</RequestId>
        </ResponseMetadata> </DeleteEndpointResponse>
```

DeletePlatformApplication

Deletes a platform application object for one of the supported push notification services, such as APNS and GCM. 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 (p. 67).

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 (p. 69).

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

Example

Example

Sample Request

```
POST http://sns.us-west-2.amazonaws.com/ HTTP/1.1 ...
      PlatformApplicationArn=arn%3Aaws%3Asns%3Aus-
west-2%3A123456789012%3Aapp%2FGCM%2Fgcmpushapp
      &Action=DeletePlatformApplication &SignatureMethod=HmacSHA256
      &AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE &SignatureVersion=2
&Version=2010-03-31
      &Signature=Mh7X%2BQo%2BGpcm5B1IpkovBaRiJCJOqvFlIOYzL62SGrg%3D
      &Timestamp=2013-07-01T23%3A02%3A03.872Z
```

Sample Response

```
HTTP/1.1 200 OK ... <DeletePlatformApplicationResponse
      xmlns="http://sns.amazonaws.com/doc/2010-03-31/"> <ResponseMetadata>
      <RequestId>097dac18-7a77-5823-a8dd-e65476dcb037</RequestId>
      </ResponseMetadata> </DeletePlatformApplicationResponse>
```

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 (p. 67).

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 (p. 69).

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

Example

Example

Sample Request

```
http://sns.us-east-1.amazonaws.com/
        &TopicArn=arn%3Aaws%3Asns%3Aus-east-1%3A123456789012%3AMy-Topic
&Action=DeleteTopic
        &SignatureVersion=2 &SignatureMethod=HmacSHA256
        &Timestamp=2010-03-31T12%3A00%3A00.000Z &AWSAccessKeyId=(AWS Access
Key Id)
        &Signature=mQA3nJI%2BcmAIY7r8HCArGElSqPX5JG4UGzF4yo0RygE%3D
```

Sample Response

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

```
<RequestId>f3aa9ac9-3c3d-11df-8235-9dab105e9c32</RequestId>
</ResponseMetadata> </DeleteTopicResponse>
```

GetEndpointAttributes

Retrieves the endpoint attributes for a device on one of the supported push notification services, such as GCM 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 (p. 67).

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), Attributesentry.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.

Type: String to String map

Errors

For information about the errors that are common to all actions, see Common Errors (p. 69).

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

Example

Example

Sample Request

```
POST http://sns.us-west-2.amazonaws.com/ HTTP/1.1 ...
      Action=GetEndpointAttributes &SignatureMethod=HmacSHA256
      &AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
      &EndpointArn=arn%3Aaws%3Asns%3Aus-west-2%3A123456789012%3Aendpoint
%2FGCM%2Fgcmpushapp%2F5e3e9847-3183-3f18-a7e8-671c3a57d4b3
      &SignatureVersion=2 &Version=2010-03-31
      &Signature=%2B2egbEoT4npw3p5H3wiIdzZBoTn4KI3UWmMFyBsHH9c%3D
      &Timestamp=2013-07-01T22%3A44%3A56.515Z
```

Sample Response

```
HTTP/1.1 200 OK ... <GetEndpointAttributesResponse
      xmlns="http://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...jsM0PKPxKhddCzx6paEsyay9Zn3D4wNUJb8m6
value>
      </entry> </Attributes> </GetEndpointAttributesResult>
      <ResponseMetadata>
      <RequestId>6c725a19-a142-5b77-94f9-1055a9ea04e7</RequestId>
      </ResponseMetadata> </GetEndpointAttributesResponse>
```

GetPlatformApplicationAttributes

Retrieves the attributes of the platform application object for the supported push notification services, such as APNS and GCM. 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 (p. 67).

PlatformApplicationArn

PlatformApplicationArn for GetPlatformApplicationAttributesInput.
Type: String
Required: Yes

Response Elements

The following element is returned by the service.

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

Attributes include the following:

- `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 (p. 69).

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

Example

Example

Sample Request

```
POST http://sns.us-west-2.amazonaws.com/ HTTP/1.1 ...
        PlatformApplicationArn=arn%3Aaws%3Asns%3Aus-
west-2%3A123456789012%3Aapp%2FGCM%2Fgcmpushapp
        &Action=GetPlatformApplicationAttributes &SignatureMethod=HmacSHA256
        &AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE &SignatureVersion=2
 &Version=2010-03-31
        &Signature=UGMaCq8CCJGSYXO9Ehr2VuHIBYSe6WbxkqgMKRslTK4%3D
        &Timestamp=2013-07-01T22%3A40%3A50.643Z
```

Sample Response

```
HTTP/1.1 200 OK ... <GetPlatformApplicationAttributesResponse
        xmlns="http://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>
```

GetSMSAttributes

Returns the settings for sending SMS messages from your 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 (p. 67).

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), attributesentry.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 (p. 69).

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 account.

HTTP Status Code: 429

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 (p. 67).

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), Attributesentry.N.value (value)

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

- `SubscriptionArn` -- the subscription's ARN
- `TopicArn` -- the topic ARN that the subscription is associated with
- `Owner` -- the AWS account ID of the subscription's owner
- `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

Type: String to String map

Errors

For information about the errors that are common to all actions, see Common Errors (p. 69).

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

Example

Example

Sample Request

```
http://sns.us-east-1.amazonaws.com/
        ?SubscriptionArn=arn%3Aaws%3Asns%3Aus-east-1%3A123456789012%3AMy-
Topic%3A80289ba6-0fd4-4079-afb4-ce8c8260f0ca
        &Action=GetSubscriptionAttributes &SignatureVersion=2
        &SignatureMethod=HmacSHA256 &Timestamp=2010-03-31T12%3A00%3A00.000Z
        &AWSAccessKeyId=(AWS Access Key Id)
        &Signature=92lBGRVq0%2BxhaACaBGqtdemy%2Bi9isfgyTljCbJM80Yk%3D
```

Sample Response

```
<GetSubscriptionAttributesResponse
        xmlns="http://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-1:123456789012:My-
Topic:80289ba6-0fd4-4079-afb4-ce8c8260f0ca</value>
        </entry> </Attributes> </GetSubscriptionAttributesResult>
        <ResponseMetadata>
        <RequestId>057f074c-33a7-11df-9540-99d0768312d3</RequestId>
        </ResponseMetadata> </GetTopicAttributesResponse>
```

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 (p. 67).

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), Attributesentry.N.value (value)

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

- `TopicArn` -- the topic's ARN
- `Owner` -- the AWS account ID of the topic's owner
- `Policy` -- the JSON serialization of the topic's access control policy
- `DisplayName` -- the human-readable name used in the "From" field for notifications to email and email-json endpoints
- `SubscriptionsPending` -- the number of subscriptions pending confirmation on this topic
- `SubscriptionsConfirmed` -- the number of confirmed subscriptions on this topic
- `SubscriptionsDeleted` -- the number of deleted subscriptions on this topic
- `DeliveryPolicy` -- the JSON serialization of the topic's delivery policy
- `EffectiveDeliveryPolicy` -- the JSON serialization of the effective delivery policy that takes into account system defaults

Type: String to String map

Errors

For information about the errors that are common to all actions, see Common Errors (p. 69).

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

Example

Example

Sample Request

```
http://sns.us-east-1.amazonaws.com/
        ?TopicArn=arn%3Aaws%3Asns%3Aus-east-1%3A123456789012%3AMy-Topic
        &Action=GetTopicAttributes &SignatureVersion=2
&SignatureMethod=HmacSHA256
        &Timestamp=2010-03-31T12%3A00%3A00.000Z &AWSAccessKeyId=(AWS Access
Key Id)
        &Signature=92lBGRVq0%2BxhaACaBGqtdemy%2Bi9isfgyTljCbJM80Yk%3D
```

Sample Response

```
<GetTopicAttributesResponse
        xmlns="http://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-1/698519295917/test__default_policy_ID&quot;,&quot;Statement&quot;
        :
        [{&quot;Effect&quot;:&quot;Allow&quot;,&quot;Sid&quot;:&quot;us-
east-1/698519295917/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:AddPermiss
east-1:698519295917: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-1:123456789012:My-Topic</value> </entry>
        </Attributes> </GetTopicAttributesResult> <ResponseMetadata>
        <RequestId>057f074c-33a7-11df-9540-99d0768312d3</RequestId>
        </ResponseMetadata> </GetTopicAttributesResponse>
```

ListEndpointsByPlatformApplication

Lists the endpoints and endpoint attributes for devices in a supported push notification service, such as GCM 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.

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 67).

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 (p. 62) 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 (p. 69).

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

Example

Example

Sample Request

```
POST http://sns.us-west-2.amazonaws.com/ HTTP/1.1 ...
        PlatformApplicationArn=arn%3Aaws%3Asns%3Aus-
west-2%3A123456789012%3Aapp%2FGCM%2Fgcmpushapp
        &Action=ListEndpointsByPlatformApplication
&SignatureMethod=HmacSHA256
        &AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE &SignatureVersion=2
&Version=2010-03-31
        &Signature=e6H4sJSCRBBlh%2BaigB%2FtYgp4%2Bjl7dikAQ6WKf%2BMTwNM%3D
        &Timestamp=2013-07-01T23%3A00%3A52.515Z
```

Sample Response

```
HTTP/1.1 200 OK ... <ListEndpointsByPlatformApplicationResponse
        xmlns="http://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...jsM0PKPxKhddCzx6paEsyay9Zn3D4wNUJb8m6
value>
        </entry> </Attributes> </member> </Endpoints>
        </ListEndpointsByPlatformApplicationResult> <ResponseMetadata>
        <RequestId>9a48768c-dac8-5a60-aec0-3cc27ea08d96</RequestId>
        </ResponseMetadata> </ListEndpointsByPlatformApplicationResponse>
```

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 (p. 67).

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 (p. 69).

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 account.

HTTP Status Code: 429

ListPlatformApplications

Lists the platform application objects for the supported push notification services, such as APNS and GCM. 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.

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 67).

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 (p. 64) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 69).

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

Example

Example

Sample Request

```
POST http://sns.us-west-2.amazonaws.com/ HTTP/1.1 ...
        Action=ListPlatformApplications &SignatureMethod=HmacSHA256
        &AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE &SignatureVersion=2
&Version=2010-03-31
        &Signature=drVbTuyR5N9e88WJMNPzBOjNFNvawkCaMfZI0xa9kIQ%3D
        &Timestamp=2013-07-01T22%3A33%3A55.618Z
```

Sample Response

```
HTTP/1.1 200 OK ... <ListPlatformApplicationsResponse
        xmlns="http://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>
```

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.

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 67).

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 (p. 65) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 69).

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

Example

Example

Sample Request

```
http://sns.us-east-1.amazonaws.com/ &Action=ListSubscriptions
        &SignatureVersion=2 &SignatureMethod=HmacSHA256
        &Timestamp=2010-03-31T12%3A00%3A00.000Z &AWSAccessKeyId=(AWS Access
Key ID)
```

```
                    &Signature=SZmBxEPqfs9R7xxhSt6C1b7PnOEvg%2BSVyyMYJfLRFCA%3D
```

Sample Response

```
<ListSubscriptionsResponse
        xmlns="http://sns.amazonaws.com/doc/2010-03-31/">
<ListSubscriptionsResult>
        <Subscriptions> <member>
        <TopicArn>arn:aws:sns:us-east-1:698519295917:My-Topic</TopicArn>
        <Protocol>email</Protocol>
        <SubscriptionArn>arn:aws:sns:us-east-1:123456789012: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>
```

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.

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 67).

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 (p. 65) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 69).

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

Example

Example

Sample Request

```
http://sns.us-east-1.amazonaws.com/
        ?TopicArn=arn%3Aaws%3Asns%3Aus-east-1%3A123456789012%3AMy-Topic
        &Action=ListSubscriptionsByTopic &SignatureVersion=2
&SignatureMethod=HmacSHA256
        &Timestamp=2010-03-31T12%3A00%3A00.000Z &AWSAccessKeyId=(AWS Access
Key ID)
        &Signature=SZmBxEPqfs9R7xxhSt6C1b7PnOEvg%2BSVyyMYJfLRFCA%3D
```

Sample Response

```
<ListSubscriptionsByTopicResponse
        xmlns="http://sns.amazonaws.com/doc/2010-03-31/">
<ListSubscriptionsByTopicResult>
        <Subscriptions> <member>
        <TopicArn>arn:aws:sns:us-east-1:123456789012:My-Topic</TopicArn>
        <Protocol>email</Protocol>
        <SubscriptionArn>arn:aws:sns:us-east-1:123456789012: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>
```

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.

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 67).

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 (p. 66) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 69).

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

Example

Example

Sample Request

```
http://sns.us-east-1.amazonaws.com/ ?Action=ListTopics &SignatureVersion=2
     &SignatureMethod=HmacSHA256 &Timestamp=2010-03-31T12%3A00%3A00.000Z
     &AWSAccessKeyId=(AWS Access Key ID)
```

```
                  &Signature=tPg1qKNTNVPydnL3Yx5Fqm2O9GxCr9vh3EF5r9%2F5%2BJs%3D
```

Sample Response

```
<ListTopicsResponse xmlns="http://sns.amazonaws.com/doc/2010-03-31/">
        <ListTopicsResult> <Topics> <member>
        <TopicArn>arn:aws:sns:us-east-1:123456789012:My-Topic</TopicArn> </
member>
        </Topics> </ListTopicsResult> <ResponseMetadata>
        <RequestId>3f1478c7-33a9-11df-9540-99d0768312d3</RequestId>
        </ResponseMetadata> </ListTopicsResponse>
```

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 (p. 67).

phoneNumber

The phone number to opt in.

Type: String

Required: Yes

Errors

For information about the errors that are common to all actions, see Common Errors (p. 69).

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 account.

HTTP Status Code: 429

Publish

Sends a message to all of a topic's subscribed endpoints. When a `messageId` is returned, the message has been saved and Amazon SNS will attempt to deliver it to the topic's subscribers shortly. The format of the outgoing message to each subscribed endpoint depends on the notification protocol.

To use the `Publish` action for sending 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.

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 67).

Message

The message you want to send to the topic.

If 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: Messages must be UTF-8 encoded strings at most 256 KB in size (262144 bytes, not 262144 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), MessageAttributesentry.N.Value (value)

Message attributes for Publish action.

Type: String to MessageAttributeValue (p. 63) object map

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").

For information about sending different messages for each protocol using the AWS Management Console, go to Create Different Messages for Each Protocol in the *Amazon Simple Notification Service Getting Started Guide*.

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 ASCII text that begins with a letter, number, or punctuation mark; must not include line breaks or control characters; and must be less than 100 characters long.

Type: String

Required: No

TargetArn

Either TopicArn or EndpointArn, but not both.

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 element is returned by the service.

MessageId

Unique identifier assigned to the published message.
Length Constraint: Maximum 100 characters
Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 69).

AuthorizationError

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

HTTP Status Code: 403

EndpointDisabled

Exception error indicating 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

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.

HTTP Status Code: 400

PlatformApplicationDisabled

Exception error indicating platform application disabled.

HTTP Status Code: 400

Examples

Example

Sample Request

```
The following example publishes a different messages to each protocol:
      http://sns.us-east-1.amazonaws.com/ ?Subject=My%20first%20message
      &TopicArn=arn%3Aaws%3Asns%3Aus-east-1%3A698519295917%3AMy-Topic
      &Message=Hello%20world%21 &Action=Publish &SignatureVersion=2
      &SignatureMethod=HmacSHA256 &Timestamp=2010-03-31T12%3A00%3A00.000Z
      &AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
      &Signature=9GZysQ4Jpnz%2BHklqM7VFTvEcjR2LIUtn6jW47054xxE%3D Use the
following JSON
      object format for the Message parameter to send different messages to
each protocol
      (linebreaks added for readability): { "default" : "some message",
"email" : "some email
      message", "email-json" : "some email-json message", "http" : "some
http message", "https" :
      "some https message", "sqs" : "some sqs message" }
```

Sample Response

```
<PublishResponse xmlns="http://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

Sample Request

```
 POST http://sns.us-west-2.amazonaws.com/ HTTP/1.1 ... Action=Publish
        &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
        &TargetArn=arn%3Aaws%3Asns%3Aus-west-2%3A803981987763%3Aendpoint
%2FAPNS_SANDBOX%2Fpushapp%2F98e9ced9-f136-3893-9d60-776547eafebb
        &SignatureMethod=HmacSHA256 &AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
        &SignatureVersion=2 &Version=2010-03-31
        &Signature=vmqc4XRupKAxsDAdN4j4Ayw5LQljXMps3kss4bkDfCk%3D
        &Timestamp=2013-07-18T22%3A44%3A09.452Z &MessageStructure=json
```

Sample Response

```
 HTTP/1.1 200 OK ... <PublishResponse
        xmlns="http://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>
```

RemovePermission

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

Request Parameters

For information about the parameters that are common to all actions, see Common
Parameters (p. 67).

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 (p. 69).

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

Example

Example

Sample Request

```
http://sns.us-east-1.amazonaws.com/
        ?TopicArn=arn%3Aaws%3Asns%3Aus-east-1%3A123456789012%3AMy-Test
&Label=NewPermission
        &Action=RemovePermission &SignatureVersion=2
&SignatureMethod=HmacSHA256
        &Timestamp=2010-03-31T12%3A00%3A00.000Z &AWSAccessKeyId=(AWS Access
Key ID)
        &Signature=N1abwRY9i7zaSQmbAlm71pPf9EEFOqNbQL1alzw2yCg%3D
```

Sample Response

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

SetEndpointAttributes

Sets the attributes for an endpoint for a device on one of the supported push notification services, such as GCM 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 (p. 67).

Attributes , Attributes.entry.N.key (key), Attributesentry.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 (p. 69).

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

Example

Example

Sample Request

```
POST http://sns.us-west-2.amazonaws.com/ HTTP/1.1 ...
```

```
        Attributes.entry.1.key=CustomUserData &Action=SetEndpointAttributes
        &SignatureMethod=HmacSHA256 &Attributes.entry.1.value=My+custom
+userdata
        &AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
        &EndpointArn=arn%3Aaws%3Asns%3Aus-west-2%3A123456789012%3Aendpoint
%2FGCM%2Fgcmpushapp%2F5e3e9847-3183-3f18-a7e8-671c3a57d4b3
        &SignatureVersion=2 &Version=2010-03-31
        &Signature=CFTGfGOS5vgSU3%2FZgv2h%2FJdWgr2JQdDJSrUU9k38wSM%3D
        &Timestamp=2013-07-01T22%3A56%3A45.582Z
```

Sample Response

```
 HTTP/1.1 200 OK ... <SetEndpointAttributesResponse
        xmlns="http://sns.amazonaws.com/doc/2010-03-31/"> <ResponseMetadata>
        <RequestId>2fe0bfc7-3e85-5ee5-a9e2-f58b35e85f6a</RequestId>
        </ResponseMetadata> </SetEndpointAttributesResponse>
```

SetPlatformApplicationAttributes

Sets the attributes of the platform application object for the supported push notification services, such as APNS and GCM. 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 (p. 67).

Attributes , Attributes.entry.N.key (key), Attributesentry.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 APNS/APNS_SANDBOX, PlatformCredential is private key. For GCM, PlatformCredential is "API key". For ADM, PlatformCredential is "client secret".
- `PlatformPrincipal` -- The principal received from the notification service. For APNS/APNS_SANDBOX, PlatformPrincipal is SSL certificate. For GCM, PlatformPrincipal is not applicable. For ADM, PlatformPrincipal is "client id".
- `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.
- `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.

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 (p. 69).

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

Example

Example

Sample Request

```
POST http://sns.us-west-2.amazonaws.com/ HTTP/1.1 ...

Attributes.entry.1.key=EventEndpointCreated&PlatformApplicationArn=arn%3Aaws
%3Asns%3Aus-west-2%3A123456789012%3Aapp%2FGCM%2Fgcmpushapp
        &Action=SetPlatformApplicationAttributes &SignatureMethod=HmacSHA256
        &Attributes.entry.1.value=arn%3Aaws%3Asns%3Aus-
west-2%3A123456789012%3Atopicarn
        &AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE &SignatureVersion=2
 &Version=2010-03-31
        &Signature=06L2TsW3jiH%2FGKDYuT8w4NojSrTf4Ig2GKqGeJPhPT4%3D
        &Timestamp=2013-07-01T22%3A53%3A17.800Z
```

Sample Response

```
HTTP/1.1 200 OK ... <SetPlatformApplicationAttributesResponse
        xmlns="http://sns.amazonaws.com/doc/2010-03-31/"> <ResponseMetadata>
        <RequestId>cf577bcc-b3dc-5463-88f1-3180b9412395</RequestId>
        </ResponseMetadata> </SetPlatformApplicationAttributesResponse>
```

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 Sending an SMS Message in the *Amazon SNS Developer Guide*.

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 67).

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

The default settings for sending SMS messages from your 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 exceed the maximum, contact AWS Support or your AWS sales representative for a service 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 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 principle 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 (p. 69).

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 account.

HTTP Status Code: 429

SetSubscriptionAttributes

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 67).

AttributeName

The name of the attribute you want to set. Only a subset of the subscriptions attributes are mutable.

Valid values: `DeliveryPolicy | RawMessageDelivery`

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 (p. 69).

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

Example

Example

Sample Request

```
The following example sets the delivery policy to 5 total retries
        http://sns.us-east-1.amazonaws.com/ ?
AttributeValue={"healthyRetryPolicy":{"numRetries":5}}
```

```
        &SubscriptionArn=arn%3Aaws%3Asns%3Aus-east-1%3A123456789012%3AMy-
Topic%3A80289ba6-0fd4-4079-afb4-ce8c8260f0ca
        &AttributeName=DeliveryPolicy &Action=SetSubscriptionAttributes
        &SignatureVersion=2 &SignatureMethod=HmacSHA256
        &Timestamp=2010-03-31T12%3A00%3A00.000Z &AWSAccessKeyId=(AWS Access
 Key Id)
        &Signature=mQA3nJI%2BcmAIY7r8HCArGElSqPX5JG4UGzF4yo0RygE%3D The JSON
format for the
        DeliveryPolicy AttributeValue (linebreaks added for readability):
{ "healthyRetryPolicy": {
        "minDelayTarget": <int>, "maxDelayTarget": <int>, "numRetries":
<int>,
        "numMaxDelayRetries": <int>, "backoffFunction":
        "<linear|arithmetic|geometric|exponential>" }, "throttlePolicy": {
        "maxReceivesPerSecond": <int> } }
```

Sample Response

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

SetTopicAttributes

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

Request Parameters

For information about the parameters that are common to all actions, see Common
Parameters (p. 67).

AttributeName

The name of the attribute you want to set. Only a subset of the topic's attributes are mutable.

Valid values: `Policy` | `DisplayName` | `DeliveryPolicy`

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 (p. 69).

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

Example

Example

Sample Request

```
The following example sets the DisplayName attribute to MyTopicName
       http://sns.us-east-1.amazonaws.com/ ?AttributeValue=MyTopicName
       &TopicArn=arn%3Aaws%3Asns%3Aus-east-1%3A123456789012%3AMy-Topic
       &AttributeName=DisplayName &Action=SetTopicAttributes
&SignatureVersion=2
```

```
        &SignatureMethod=HmacSHA256 &Timestamp=2010-03-31T12%3A00%3A00.000Z
        &AWSAccessKeyId=(AWS Access Key Id)
        &Signature=mQA3nJI%2BcmAIY7r8HCArGElSqPX5JG4UGzF4yo0RygE%3D The
 following example sets
        the delivery policy to 5 total retries http://sns.us-
east-1.amazonaws.com/
        ?AttributeValue={"http":{"defaultHealthyRetryPolicy":
{"numRetries":5}}}
        &TopicArn=arn%3Aaws%3Asns%3Aus-east-1%3A123456789012%3AMy-Topic
        &AttributeName=DeliveryPolicy &Action=SetTopicAttributes
 &SignatureVersion=2
        &SignatureMethod=HmacSHA256 &Timestamp=2010-03-31T12%3A00%3A00.000Z
        &AWSAccessKeyId=(AWS Access Key Id)
        &Signature=mQA3nJI%2BcmAIY7r8HCArGElSqPX5JG4UGzF4yo0RygE%3D The JSON
 format for the
        DeliveryPolicy AttributeValue (linebreaks added for readability):
{ "http": {
        "defaultHealthyRetryPolicy": { "minDelayTarget": <int>,
"maxDelayTarget": <int>,
        "numRetries": <int>, "numMaxDelayRetries": <int>, "backoffFunction":
        "<linear|arithmetic|geometric|exponential>" },
"disableSubscriptionOverrides":
        <boolean>, "defaultThrottlePolicy": { "maxReceivesPerSecond":
<int> } }
```

Sample Response

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

Subscribe

Prepares to subscribe an endpoint by sending the endpoint a confirmation message. To actually create a subscription, the endpoint owner must call the `ConfirmSubscription` action with the token from the confirmation message. Confirmation tokens are valid for three days.

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 67).

Endpoint

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

- For the `http` protocol, the endpoint is an URL beginning with "http://"
- For the `https` protocol, the 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.

Type: String

Required: No

Protocol

The protocol 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.

Type: String

Required: Yes

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 the service was able to create a subscription immediately (without requiring endpoint owner confirmation).

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 69).

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

SubscriptionLimitExceeded
>Indicates that the customer already owns the maximum allowed number of subscriptions.
>
>HTTP Status Code: 403

Example

Example

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

Sample Request

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

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>
```

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.

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 67).

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 (p. 69).

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

Example

Example

Sample Request

```
http://sns.us-east-1.amazonaws.com/
        ?SubscriptionArn=arn%3Aaws%3Asns%3Aus-east-1%3A123456789012%3AMy-
Topic%3A80289ba6-0fd4-4079-afb4-ce8c8260f0ca
        &Action=Unsubscribe &SignatureVersion=2 &SignatureMethod=HmacSHA256
        &Timestamp=2010-03-31T12%3A00%3A00.000Z &AWSAccessKeyId=(AWS Access
 Key ID)
        &Signature=e8IwhPzuWeMvPDVrN7jUVxasd3Wv2LuO8x6rE23VCv8%3D
```

Sample Response

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

```
<ResponseMetadata>
<RequestId>18e0ac39-3776-11df-84c0-b93cc1666b84</RequestId>
</ResponseMetadata> </UnsubscribeResponse>
```

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:

Endpoint

Endpoint for mobile app and device.

Contents

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

Attributes for endpoint.

Type: String to String map

Required: No

EndpointArn

EndpointArn for mobile app and device.

Type: String

Required: No

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 Using Amazon SNS Message Attributes.

Contents

BinaryValue

Binary type attributes can store any binary data, for example, compressed data, encrypted data, or images.

Type: Base64-encoded binary data

Required: No

DataType

Amazon SNS supports the following logical data types: String, Number, and Binary. For more information, see Message Attribute Data Types.

Type: String

Required: Yes

StringValue

Strings are Unicode with UTF8 binary encoding. For a list of code values, see http://en.wikipedia.org/wiki/ASCII#ASCII_printable_characters.

Type: String

Required: No

PlatformApplication

Platform application object.

Contents

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

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

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

Common Parameters

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

Action
> The action to be performed.
>
> Type: string
>
> Required: Yes

Version
> The API version that the request is written for, expressed in the format YYYY-MM-DD.
>
> Type: string
>
> Required: Yes

X-Amz-Algorithm
> The hash algorithm that you used to create the request signature.
>
> Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.
>
> Type: string
>
> Valid Values: `AWS4-HMAC-SHA256`
>
> Required: Conditional

X-Amz-Credential
> The credential scope value, which is a string that includes your access key, the date, the region you are targeting, the service you are requesting, and a termination string ("aws4_request"). The value is expressed in the following format: *access_key*/*YYYYMMDD*/*region*/*service*/aws4_request.
>
> For more information, see Task 2: Create a String to Sign for Signature Version 4 in the *Amazon Web Services General Reference*.
>
> Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.
>
> Type: string

Required: Conditional

X-Amz-Date

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

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

Type: string

Required: Conditional

X-Amz-Security-Token

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

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

Type: string

Required: Conditional

X-Amz-Signature

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

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

Type: string

Required: Conditional

X-Amz-SignedHeaders

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

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

Type: string

Required: Conditional

Common Errors

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

IncompleteSignature
> The request signature does not conform to AWS standards.
>
> HTTP Status Code: 400

InternalFailure
> The request processing has failed because of an unknown error, exception or failure.
>
> HTTP Status Code: 500

InvalidAction
> The action or operation requested is invalid. Verify that the action is typed correctly.
>
> HTTP Status Code: 400

InvalidClientTokenId
> The X.509 certificate or AWS access key ID provided does not exist in our records.
>
> HTTP Status Code: 403

InvalidParameterCombination
> Parameters that must not be used together were used together.
>
> HTTP Status Code: 400

InvalidParameterValue
> An invalid or out-of-range value was supplied for the input parameter.
>
> HTTP Status Code: 400

InvalidQueryParameter
> The AWS query string is malformed or does not adhere to AWS standards.
>
> HTTP Status Code: 400

MalformedQueryString
> The query string contains a syntax error.
>
> HTTP Status Code: 404

MissingAction
> The request is missing an action or a required parameter.
>
> HTTP Status Code: 400

MissingAuthenticationToken

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

HTTP Status Code: 403

MissingParameter

A required parameter for the specified action is not supplied.

HTTP Status Code: 400

OptInRequired

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

HTTP Status Code: 403

RequestExpired

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

HTTP Status Code: 400

ServiceUnavailable

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

HTTP Status Code: 503

Throttling

The request was denied due to request throttling.

HTTP Status Code: 400

ValidationError

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

HTTP Status Code: 400