

Package ‘aws.sns’

July 4, 2017

Type Package

Title AWS SNS Client Package

Version 0.1.7

Date 2017-07-02

Description A simple client package for the Amazon Web Services ('AWS') Simple Notification Service ('SNS') 'API' <<https://aws.amazon.com/sns/>>.

License GPL (>= 2)

Imports stats, httr, xml2, jsonlite, aws.signature (>= 0.3.4)

URL <https://github.com/cloudyr/aws.sns>

BugReports <https://github.com/cloudyr/aws.sns/issues>

RoxygenNote 6.0.1

NeedsCompilation no

Author Thomas J. Leeper [aut, cre]

Maintainer Thomas J. Leeper <thosjleeper@gmail.com>

Repository CRAN

Date/Publication 2017-07-04 20:31:37 UTC

R topics documented:

aws.sns-package	2
add_topic_permission	2
create_topic	3
get_subscription_attrs	4
get_topic_attrs	5
list_subscriptions	6
publish	7
snsHTTP	8
subscribe	9

Index	11
--------------	-----------

aws.sns-package	<i>aws.sqs</i>
-----------------	----------------

Description

AWS SNS Client Package

Details

A simple client package for the Amazon Web Services (AWS) Simple Notification Service (SNS) REST API.

Author(s)

Thomas J. Leeper <thosjleeper@gmail.com>

add_topic_permission	<i>Add/remove access permissions</i>
----------------------	--------------------------------------

Description

Add/remove permissions to publish to topic

Usage

```
add_topic_permission(topic, label, permissions, ...)
```

```
remove_topic_permission(topic, label, ...)
```

Arguments

topic	A character string containing an SNS Topic Amazon Resource Name (ARN).
label	A character string containing a label for the permission.
permissions	A named list of character strings, where the names of the list are AWS Account ID numbers and the list elements are SNS API endpoints (e.g. “Publish”, “Subscribe”, “Unsubscribe”, etc.).
...	Additional arguments passed to snsHTTP .

Details

Add or remove a permission, which grants another AWS account permission to use an SNS topic.

Value

If successful, a logical TRUE. Otherwise, a data structure of class “aws_error” containing any error message(s) from AWS and information about the request attempt.

Author(s)

Thomas J. Leeper

References

[AddPermission](#) [RemovePermission](#)

create_topic	<i>Manage topics</i>
--------------	----------------------

Description

Create, delete, and list topics

Usage

```
create_topic(name, ...)
```

```
delete_topic(topic, ...)
```

```
list_topics(token, ...)
```

Arguments

name	A character string containing a (private) name for the topic.
...	Additional arguments passed to snsHTTP .
topic	A character string containing an SNS Topic Amazon Resource Name (ARN).
token	A paging parameter used to return additional pages of results. This will be available in the “NextToken” attribute of a previous call to <code>list_topics</code> .

Details

`create_topic` creates a new topic. The name is a private name for the topic. Use [set_topic_attrs](#) to set a publicly visible name for the topic. `delete_topic` deletes a named topic. `list_topics` lists all currently available topics.

`list_topics` lists topics. Up to 100 subscriptions are returned by each request. The token argument can be used to return additional results.

Value

For `create_topic`: If successful, a character string containing an SNS Topic ARN. Otherwise, a data structure of class “aws_error” containing any error message(s) from AWS and information about the request attempt. For `delete_topic`: If successful, a logical TRUE. Otherwise, a data structure of class “aws_error” containing any error message(s) from AWS and information about the request attempt. For `list_topics`: If successful, a data frame. Otherwise, a data structure of class “aws_error” containing any error message(s) from AWS and information about the request attempt.

Author(s)

Thomas J. Leeper

References

[CreateTopic](#) [DeleteTopic](#) [ListTopics](#)

See Also

[link{delete_topic}](#)

Examples

```
## Not run:
top <- create_topic("new_topic")
get_topic_attrs(top)
list_topics()
delete_topic(top)

## End(Not run)
```

get_subscription_attrs

Get/set subscription attributes

Description

Get or set subscription attributes

Usage

```
get_subscription_attrs(subscription, ...)
```

```
set_subscription_attrs(subscription, attribute, ...)
```

Arguments

subscription	A character string containing an SNS Subscription Amazon Resource Name (ARN).
...	Additional arguments passed to snsHTTP .
attribute	A named, single-element list containing a subscription attribute. Name must be either "DeliveryPolicy" or "RawMessageDelivery".

Details

get_subscription_attrs retrieves subscription attributes, while set_subscription_attrs can be used to set those attributes.

Value

If successful, for `get_subscription_attrs`: a named list containing some details of the request, for `set_subscription_attrs`: a logical TRUE value. Otherwise, a data structure of class “aws_error” containing any error message(s) from AWS and information about the request attempt.

Author(s)

Thomas J. Leeper

References

[GetSubscriptionAttributes](#) [SetSubscriptionAttributes](#)

See Also

[link{subscribe}](#) [link{list_subscriptions}](#)

get_topic_attrs	<i>Get/set topic attributes</i>
-----------------	---------------------------------

Description

Get or set topic attributes

Usage

```
get_topic_attrs(topic, ...)
```

```
set_topic_attrs(topic, attribute, ...)
```

Arguments

topic	A character string containing an SNS Topic Amazon Resource Name (ARN).
...	Additional arguments passed to snsHTTP .
attribute	A named, single-element list containing a topic attribute. Name must be either “Policy”, “DeliveryPolicy”, or “DisplayName”.

Details

`get_topic_attrs` retrieves topic attributes, while `set_topic_attrs` can be used to set those attributes.

Value

If successful, for `get_topic_attrs`: a named list containing some details of the request, for `set_topic_attrs`: a logical TRUE value. Otherwise, a data structure of class “aws_error” containing any error message(s) from AWS and information about the request attempt.

Author(s)

Thomas J. Leeper

References

[GetTopicAttributes](#) [SetTopicAttributes](#)

list_subscriptions *List subscriptions for a topic*

Description

Lists subscriptions for a specified topic

Usage

```
list_subscriptions(topic, token, ...)
```

Arguments

topic	A character string containing an SNS Topic Amazon Resource Name (ARN).
token	A paging paramter used to return additional pages of results. This will be available in the “NextToken” attribute of a previous call to list_subscriptions.
...	Additional arguments passed to snsHTTP .

Details

Lists subscriptions for a specified topic. Up to 100 subscriptions are returned by each request. The token argument can be used to return additional results.

Value

If successful, a dataframe containing details of . Otherwise, a data structure of class “aws_error” containing any error message(s) from AWS and information about the request attempt.

Author(s)

Thomas J. Leeper

References

[ListSubscriptions](#)

See Also

[link{subscribe}](#) [link{unsubscribe}](#) [link{get_subscription_attrs}](#)

publish *Publish to a topic or endpoint*

Description

Publish a message to a specified topic or application endpoint.

Usage

```
publish(topic, endpoint, message, subject, ...)
```

Arguments

topic	Optionally, a character string containing an SNS Topic Amazon Resource Name (ARN). Must specify topic or endpoint.
endpoint	Optionally, a character string containing an SNS Application Endpoint ARN. Must specify topic or endpoint.
message	Either a single character string containing a message to be sent to all endpoints, or a named list of messages to be sent to specific endpoints (where the names of each element correspond to endpoints).
subject	Optionally, a character string containing a subject line (e.g., to be used for an email endpoint).
...	Additional arguments passed to snsHTTP .

Details

Publishes a message to a topic or an application endpoint. Messages can be the same for all endpoints or customized so that, for example, a short 140-character message is sent to SMS endpoints that are subscribed to a topic while longer messages are sent to email endpoints, etc. The allowed message types are: default, email, email-json, sqs, sms, http, https, and application.

Value

If successful, a character string containing a message ID. Otherwise, a data structure of class “aws_error” containing any error message(s) from AWS and information about the request attempt.

Author(s)

Thomas J. Leeper

References

[Publish](#)

Examples

```
## Not run:
top <- create_topic("new_topic")

# simple notifications
publish(top, message = "This is a notification message", subject = "Notification!")

# endpoint-specific notification
publish(top, message = list(sms = "This is an sms message",
                           email = "This is an email"),
        subject = "Notification!")

delete_topic(top)

## End(Not run)
```

snsHTTP

*Execute SNS API Request***Description**

This is the workhorse function to execute calls to the SNS API.

Usage

```
snsHTTP(query, region = Sys.getenv("AWS_DEFAULT_REGION", "us-east-1"),
        key = NULL, secret = NULL, session_token = NULL, ...)
```

Arguments

query	An optional named list containing query string parameters and their character values.
region	A character string containing an AWS region. If missing, the default “us-east-1” is used.
key	A character string containing an AWS Access Key ID. See locate_credentials .
secret	A character string containing an AWS Secret Access Key. See locate_credentials .
session_token	Optionally, a character string containing an AWS temporary Session Token. See locate_credentials .
...	Additional arguments passed to GET .

Details

This function constructs and signs an SNS API request and returns the results thereof, or relevant debugging information in the case of error.

Value

If successful, a named list. Otherwise, a data structure of class “aws-error” containing any error message(s) from AWS and information about the request attempt.

Author(s)

Thomas J. Leeper

subscribe	<i>Subscribe/Unsubscribe to a topic</i>
-----------	---

Description

Subscribes an endpoint to the specified SNS topic.

Usage

```
subscribe(topic, endpoint, protocol, ...)
```

```
unsubscribe(subscription, ...)
```

Arguments

topic	A character string containing an SNS Topic Amazon Resource Name (ARN).
endpoint	A character string containing the endpoint to be subscribed (e.g., an email address).
protocol	The allowed protocol types are: default, email, email-json, sqs, sms, http, https, and application.
...	Additional arguments passed to snsHTTP .
subscription	A character string containing an SNS Subscription Amazon Resource Name (ARN).

Details

subscribe initiates a subscription of an endpoint to an SNS topic. For example, this is used to add an email address endpoint to a topic. Subscriptions need to be confirmed by the endpoint. For example, an SMS endpoint will require an SMS response to a subscription invitation message. Subscriptions can be removed using [unsubscribe](#) (or whatever method is described in the invitation message); thus subscriptions can be handled by both users and administrator (you).

unsubscribe unsubscribes an endpoint from an SNS topic.

Value

If successful, a character string containing a subscription ARN. Otherwise, a data structure of class “aws_error” containing any error message(s) from AWS and information about the request attempt.

Author(s)

Thomas J. Leeper

References

[Subscribe](#) [Unsubscribe](#)

See Also

[list_subscriptions](#)

Examples

```
## Not run:
top <- create_topic("new_topic")
# email subscription
subscribe(top, "example@example.com", protocol = "email")

# sms subscription
subscribe(top, "555-123-4567", protocol = "sms")

delete_topic(top)

## End(Not run)
```

Index

*Topic **package**

aws.sns-package, 2

add__topic_permission

(add_topic_permission), 2

add_topic_permission, 2

aws.sns (aws.sns-package), 2

aws.sns-package, 2

create_topic, 3

delete_topic (create_topic), 3

GET, 8

get_subscription_attrs, 4

get_topic_attrs, 5

list_subscriptions, 6, 10

list_topics (create_topic), 3

locate_credentials, 8

publish, 7

remove_topic_permission

(add_topic_permission), 2

set_subscription_attrs

(get_subscription_attrs), 4

set_topic_attrs, 3

set_topic_attrs (get_topic_attrs), 5

snsHTTP, 2-7, 8, 9

subscribe, 9

unsubscribe, 9

unsubscribe (subscribe), 9