

# Package ‘aws.sqs’

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**Description** A simple client package for the Amazon Web Services ('AWS') Simple Queue Service ('SQS') <<https://aws.amazon.com/sqs/>> 'API'.

**License** GPL (>= 2)

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**Author** Thomas J. Leeper [aut, cre]

**Maintainer** Thomas J. Leeper <[thosjleeper@gmail.com](mailto:thosjleeper@gmail.com)>

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aws.sqs-package	<i>AWS SQS Client Package</i>
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**Description**

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

**Author(s)**

Thomas J. Leeper <thosjleeper@gmail.com>

**Examples**

```
## Not run:
# list current queues
list_queues()

# create a queue
queue <- create_queue("ExampleQueue")
get_queue_url("ExampleQueue")

# send message to queue
send_msg("ExampleQueue", "This is a test message")
# receive a message
(m <- receive_msg("ExampleQueue", timeout = 0))

# delete a message from queue
delete_msg("ExampleQueue", m$ReceiptHandle[1])

# delete queue
delete_queue("ExampleQueue")

## End(Not run)
```

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add_queue_permission	<i>Change queue permissions</i>
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**Description**

Add or remove queue permissions

**Usage**

```
add_queue_permission(queue, label, principal, action, query = NULL, ...)
```

```
remove_queue_permission(queue, label, query = NULL, ...)
```

**Arguments**

queue	A character string containing a queue URL, or the name of the queue.
label	A character string containing a unique label for the permission.
principal	A character vector containing the AWS account number of the principal who will be given permission. Principals and actions must be specified one-to-one or one-to-many.
action	A character vector containing an SQS permission. Valid values include: “*”, “SendMessage”, “ReceiveMessage”, “DeleteMessage”, “ChangeMessageVisibility”, “GetQueueAttributes”, “GetQueueUrl”.
query	A list specifying additional query arguments to be passed to the query argument of <a href="#">sqsHTTP</a> .
...	Additional arguments passed to <a href="#">sqsHTTP</a> .

**Details**

Add or removes a permission from an SQS queue.

**Value**

A list.

**Author(s)**

Thomas J. Leeper

**References**

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

**See Also**

[link{create\\_queue}](#) [get\\_queue\\_attrs](#) [set\\_queue\\_attrs](#)

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create_queue	<i>Create or delete a queue</i>
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### Description

Create or delete an SQS queue

### Usage

```
create_queue(name, attributes = NULL, query = NULL, ...)
```

```
delete_queue(queue, query = NULL, ...)
```

### Arguments

name	A character string containing a name for the queue.
attributes	Currently ignored
query	A list specifying additional query arguments to be passed to the query argument of <a href="#">sqsHTTP</a> .
...	Additional arguments passed to <a href="#">sqsHTTP</a> .
queue	A character string containing a queue URL, or the name of the queue.

### Details

`create_queue` creates a new SQS queue; `delete_queue` deletes a queue.

### Value

If successful, `create_queue` returns a character string containing an SQS Queue URL and `delete_queue` returns 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

[CreateQueue](#) [DeleteQueue](#)

### See Also

[get\\_queue\\_attrs](#) [set\\_queue\\_attrs](#) [link{purge\\_queue}](#)

**Examples**

```
## Not run:
# list current queues
list_queues()

# create a queue
queue <- create_queue("ExampleQueue")
get_queue_url("ExampleQueue")

# send message to queue
send_msg("ExampleQueue", "This is a test message")
# receive a message
(m <- receive_msg("ExampleQueue", timeout = 0))

# delete a message from queue
delete_msg("ExampleQueue", m$ReceiptHandle[1])

# delete queue
delete_queue("ExampleQueue")

## End(Not run)
```

get\_queue\_attrs

*Queue Attributes***Description**

Get and set queue attributes

**Usage**

```
get_queue_attrs(queue, attributes = "All", query = NULL, ...)

set_queue_attrs(queue, attributes, query = NULL, ...)
```

**Arguments**

queue	A character string containing a queue URL, or the name of the queue.
attributes	For <code>get_queue_attrs</code> , a vector of attribute names to return. For <code>set_queue_attrs</code> , a named character vector or named list of attributes and their values (as character strings). Allowed attributes are: "Policy", "VisibilityTimeout", "MaximumMessageSize", "MessageRetentionPeriod", "ApproximateNumberOfMessages", "ApproximateNumberOfMessagesNotVisible", "CreatedTimestamp", "LastModifiedTimestamp", "QueueArn", "ApproximateNumberOfMessagesDelayed", "DelaySeconds", "ReceiveMessageWaitTimeSeconds", "RedrivePolicy".
query	A list specifying additional query arguments to be passed to the query argument of <a href="#">sqsHTTP</a> .
...	Additional arguments passed to <a href="#">sqsHTTP</a> .

**Details**

Get or set the attributes for a queue.

**Value**

For `get_queue_attrs`, a `data.frame` list of queue attributes. Otherwise, a data structure of class “`aws_error`” containing any error message(s) from AWS and information about the request attempt.

For `set_queue_attrs`, a logical `TRUE` if operation was successful. 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**

[ReceiveMessage](#)

**See Also**

`link{create_queue}`

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<code>get_queue_url</code>	<i>Get a queue URL</i>
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**Description**

Retrieves the URL for an SQS queue by its name.

**Usage**

```
get_queue_url(name, owner = NULL, query = NULL, ...)
```

**Arguments**

<code>name</code>	A character string containing the name of the queue.
<code>owner</code>	A character string containing the AWS Account ID that created the queue.
<code>query</code>	A list specifying additional query arguments to be passed to the query argument of <a href="#">sqsHTTP</a> .
<code>...</code>	Additional arguments passed to <a href="#">sqsHTTP</a> .

**Value**

If successful, a character string containing an SQS Queue URL. 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**

[GetQueueURL](#)

**See Also**

[link{create\\_queue}](#) [link{delete\\_queue}](#) [get\\_queue\\_attrs](#) [set\\_queue\\_attrs](#)

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list\_queues

*List queues*

---

**Description**

List SQS queues

**Usage**

```
list_queues(starts_with = NULL, query = NULL, ...)
```

**Arguments**

starts_with	An optional character string describing the beginning of the name of queues to retrieve.
query	A list specifying additional query arguments to be passed to the query argument of <a href="#">sqsHTTP</a> .
...	Additional arguments passed to <a href="#">sqsHTTP</a> .

**Details**

For `list_queues`, a list of all SQS queue associated with an AWS account, or only those starting with a particular character string.

For `deadletter_queues`, a list of all SQS queues with a `RedrivePolicy` queue attribute configured with a dead letter queue.

**Value**

If successful, a character vector containing queue URLs. 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

[ListQueues](#) [ListDeadLetterSourceQueues](#)

## Examples

```
## Not run:  
# list current queues  
list_queues()  
  
## End(Not run)
```

---

purge\_queue

*Purge a queue*

---

## Description

Purge an SQS queue of its message

## Usage

```
purge_queue(queue, query = NULL, ...)
```

## Arguments

queue	A character string containing a queue URL, or the name of the queue.
query	A list specifying additional query arguments to be passed to the query argument of <a href="#">sqsHTTP</a> .
...	Additional arguments passed to <a href="#">sqsHTTP</a> .

## Details

Purge an SQS queue of its messages, without deleting it. Use [delete\\_queue](#) to delete the queue entirely.

## Value

If successful, 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

[PurgeQueue](#)



**See Also**

[link{create\\_queue}](#) [delete\\_queue](#)

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receive_msg	<i>Receive messages</i>
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**Description**

Receive one or more messages from an SQS queue.

**Usage**

```
receive_msg(queue, attributes = NULL, n = 1, timeout = NULL,
            wait = NULL, query = NULL, ...)
```

```
consume_msg(queue, receive_args = list(), delete_args = list())
```

```
delete_msg(queue, handle, query = NULL, ...)
```

**Arguments**

queue	A character string containing a queue URL, or the name of the queue.
attributes	Currently ignored.
n	The number of messages to retrieve (maximum 10).
timeout	A number of seconds to make the message invisible to subsequent <code>receive_msg</code> requests. This modifies the queue's default visibility timeout. See <a href="#">visibility</a> to modify this value after receiving a message.
wait	A number of seconds to wait for messages before responding to the request.
query	A list specifying additional query arguments to be passed to the query argument of <a href="#">sqsHTTP</a> .
...	Additional arguments passed to <a href="#">sqsHTTP</a> .
receive_args	A named list of arguments, other than queue, to be passed to <code>receive_msg</code> .
delete_args	A named list of arguments, other than queue and handle, to be passed to <code>delete_msg</code> .
handle	A message handle, as returned by <a href="#">receive_msg</a> .

**Details**

`receive_msg` simply receives message(s). `consume_msg` does the same and then deletes the message(s) from the queue. `delete_message` deletes one or more messages from an SQS queue. If a message is not deleted, it remains visible in the queue and will be returned by subsequent calls to [receive\\_msg](#).

**Value**

A data.frame of messages.

**Author(s)**

Thomas J. Leeper

**References**

[ReceiveMessage](#) [DeleteMessage](#) [DeleteMessageBatch](#)

**See Also**

[link{send\\_msg}](#)

**Examples**

```
## Not run:
# list current queues
list_queues()

# create a queue
queue <- create_queue("ExampleQueue")
get_queue_url("ExampleQueue")

# send message to queue
send_msg("ExampleQueue", "This is a test message")
# receive a message
(m <- receive_msg("ExampleQueue", timeout = 0))

# delete a message from queue
delete_msg("ExampleQueue", m$ReceiptHandle[1])

# delete queue
delete_queue("ExampleQueue")

## End(Not run)
```

---

send\_msg

*send\_msg*

---

**Description**

Send a message to an SQS queue

**Usage**

```
send_msg(queue, msg, attributes = NULL, delay = NULL, query = NULL, ...)
```

**Arguments**

queue	A character string containing a queue URL, or the name of the queue.
msg	A character vector containing one or more message bodies.
attributes	Currently ignored. (If msg is of length one, a specification of message attributes. Ignored otherwise.)
delay	A numeric value indicating the number of seconds between 0 and 900 to delay a specific message. If NULL, the default value for the queue applies.
query	A list specifying additional query arguments to be passed to the query argument of <a href="#">sqsHTTP</a> .
...	Additional arguments passed to <a href="#">sqsHTTP</a> .

**Value**

A list of message information, including the MessageId and an MD5 checksum of the message body.

**Author(s)**

Thomas J. Leeper

**References**

[SendMessage](#) [SendMessageBatch](#)

**See Also**

[link{receive\\_msg}](#) [link{delete\\_msg}](#)

**Examples**

```
## Not run:
# list current queues
list_queues()

# create a queue
queue <- create_queue("ExampleQueue")
get_queue_url("ExampleQueue")

# send message to queue
send_msg("ExampleQueue", "This is a test message")
# receive a message
(m <- receive_msg("ExampleQueue", timeout = 0))

# delete a message from queue
delete_msg("ExampleQueue", m$ReceiptHandle[1])

# delete queue
delete_queue("ExampleQueue")
```

```
## End(Not run)
```

---

sqsHTTP

*Execute SQS API Request*


---

### Description

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

### Usage

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

### Arguments

<code>url</code>	A character string containing an SQS API endpoint URL.
<code>query</code>	An optional named list containing query string parameters and their character values.
<code>region</code>	A character string containing an AWS region. If missing, the default “us-east-1” is used.
<code>key</code>	A character string containing an AWS Access Key ID. See <a href="#">locate_credentials</a> .
<code>secret</code>	A character string containing an AWS Secret Access Key. See <a href="#">locate_credentials</a> .
<code>session_token</code>	Optionally, a character string containing an AWS temporary Session Token. See <a href="#">locate_credentials</a> .
<code>...</code>	Additional arguments passed to <a href="#">GET</a> .

### Details

This function constructs and signs an SQS 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

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visibility	<i>Change Visibility Timeout</i>
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---

**Description**

Change the visibility timeout of received message(s)

**Usage**

```
visibility(queue, handle, timeout = NULL, query = NULL, ...)
```

**Arguments**

queue	A character string containing a queue URL, or the name of the queue.
handle	A character vector containing one or more message handles, as returned by <a href="#">receive_msg</a> .
timeout	An integer value indicating the new value of the visibility timeout, in seconds between 0 and 43200, for the message(s).
query	A list specifying additional query arguments to be passed to the query argument of <a href="#">sqsHTTP</a> .
...	Additional arguments passed to <a href="#">sqsHTTP</a> .

**Details**

Changes the visibility timeout of one or more SQS messages, by their message handle.

**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**

[ChangeMessageVisibility](#)

**See Also**

[link{receive\\_msg}](#) [link{delete\\_msg}](#)

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