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# Amazon Simple Email Service

## API Reference

API Version 2010-12-01



## Amazon Simple Email Service: API Reference

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# Welcome

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This is the API Reference for Amazon Simple Email Service (Amazon SES). This documentation is intended to be used in conjunction with the [Amazon SES Developer Guide](#).

**Note**

For a list of Amazon SES endpoints to use in service requests, see [Regions and Amazon SES](#) in the Amazon SES Developer Guide.

This document was last published on August 30, 2016.

# Actions

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The following actions are supported:

- [CloneReceiptRuleSet](#) (p. 4)
- [CreateReceiptFilter](#) (p. 5)
- [CreateReceiptRule](#) (p. 6)
- [CreateReceiptRuleSet](#) (p. 8)
- [DeleteIdentity](#) (p. 9)
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- [PutIdentityPolicy](#) (p. 41)
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- [SetReceiptRulePosition](#) (p. 63)
- [UpdateReceiptRule](#) (p. 64)
- [VerifyDomainDkim](#) (p. 65)
- [VerifyDomainIdentity](#) (p. 67)
- [VerifyEmailAddress](#) (p. 69)
- [VerifyEmailIdentity](#) (p. 71)

## CloneReceiptRuleSet

Creates a receipt rule set by cloning an existing one. All receipt rules and configurations are copied to the new receipt rule set and are completely independent of the source rule set.

For information about setting up rule sets, see the [Amazon SES Developer Guide](#).

This action is throttled at one request per second.

### Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

#### OriginalRuleSetName

The name of the rule set to clone.

Type: String

Required: Yes

#### RuleSetName

The name of the rule set to create. The name must:

- Contain only ASCII letters (a-z, A-Z), numbers (0-9), periods (.), underscores (\_), or dashes (-).
- Start and end with a letter or number.
- Contain less than 64 characters.

Type: String

Required: Yes

### Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

#### AlreadyExists

Indicates that a resource could not be created due to a naming conflict.

HTTP Status Code: 400

#### LimitExceeded

Indicates that a resource could not be created due to service limits. For a list of Amazon SES limits, see the [Amazon SES Developer Guide](#).

HTTP Status Code: 400

#### RuleSetDoesNotExist

Indicates that the provided receipt rule set does not exist.

HTTP Status Code: 400

## CreateReceiptFilter

Creates a new IP address filter.

For information about setting up IP address filters, see the [Amazon SES Developer Guide](#).

This action is throttled at one request per second.

### Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

#### Filter

A data structure that describes the IP address filter to create, which consists of a name, an IP address range, and whether to allow or block mail from it.

Type: [ReceiptFilter \(p. 91\)](#) object

Required: Yes

### Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

#### AlreadyExists

Indicates that a resource could not be created due to a naming conflict.

HTTP Status Code: 400

#### LimitExceeded

Indicates that a resource could not be created due to service limits. For a list of Amazon SES limits, see the [Amazon SES Developer Guide](#).

HTTP Status Code: 400

## CreateReceiptRule

Creates a receipt rule.

For information about setting up receipt rules, see the [Amazon SES Developer Guide](#).

This action is throttled at one request per second.

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

### After

The name of an existing rule after which the new rule will be placed. If this parameter is null, the new rule will be inserted at the beginning of the rule list.

Type: String

Required: No

### Rule

A data structure that contains the specified rule's name, actions, recipients, domains, enabled status, scan status, and TLS policy.

Type: [ReceiptRule \(p. 93\)](#) object

Required: Yes

### RuleSetName

The name of the rule set to which to add the rule.

Type: String

Required: Yes

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

### AlreadyExists

Indicates that a resource could not be created due to a naming conflict.

HTTP Status Code: 400

### InvalidLambdaFunction

Indicates that the provided AWS Lambda function is invalid, or that Amazon SES could not execute the provided function, possibly due to permissions issues. For information about giving permissions, see the [Amazon SES Developer Guide](#).

HTTP Status Code: 400

### InvalidS3Configuration

Indicates that the provided Amazon S3 bucket or AWS KMS encryption key is invalid, or that Amazon SES could not publish to the bucket, possibly due to permissions issues. For information about giving permissions, see the [Amazon SES Developer Guide](#).

HTTP Status Code: 400

### InvalidSnsTopic

Indicates that the provided Amazon SNS topic is invalid, or that Amazon SES could not publish to the topic, possibly due to permissions issues. For information about giving permissions, see the [Amazon SES Developer Guide](#).

HTTP Status Code: 400

### LimitExceeded

Indicates that a resource could not be created due to service limits. For a list of Amazon SES limits, see the [Amazon SES Developer Guide](#).

HTTP Status Code: 400

**RuleDoesNotExist**

Indicates that the provided receipt rule does not exist.

HTTP Status Code: 400

**RuleSetDoesNotExist**

Indicates that the provided receipt rule set does not exist.

HTTP Status Code: 400

# CreateReceiptRuleSet

Creates an empty receipt rule set.

For information about setting up receipt rule sets, see the [Amazon SES Developer Guide](#).

This action is throttled at one request per second.

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

### RuleSetName

The name of the rule set to create. The name must:

- Contain only ASCII letters (a-z, A-Z), numbers (0-9), periods (.), underscores (\_), or dashes (-).
- Start and end with a letter or number.
- Contain less than 64 characters.

Type: String

Required: Yes

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

### AlreadyExists

Indicates that a resource could not be created due to a naming conflict.

HTTP Status Code: 400

### LimitExceeded

Indicates that a resource could not be created due to service limits. For a list of Amazon SES limits, see the [Amazon SES Developer Guide](#).

HTTP Status Code: 400

## DeleteIdentity

Deletes the specified identity (an email address or a domain) from the list of verified identities. This action is throttled at one request per second.

### Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

#### Identity

The identity to be removed from the list of identities for the AWS Account.

Type: String

Required: Yes

### Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

### Example

#### Sample Request

```
POST / HTTP/1.1
Date: Sat, 12 May 2012 05:25:58 GMT
Host: email.us-east-1.amazonaws.com
Content-Type: application/x-www-form-urlencoded
X-Amzn-Authorization: AWS3 AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE,
  Signature=w943p13zIvtszwzZxyipi+LsgjzquvhYhnG42S6b2WLo=,
  Algorithm=HmacSHA256, SignedHeaders=Date;Host
Content-Length: 135

AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
&Action=DeleteIdentity
&Identity=domain.com
&Timestamp=2012-05-12T05%3A25%3A58.000Z
&Version=2010-12-01
```

#### Sample Response

```
<DeleteIdentityResponse xmlns="http://ses.amazonaws.com/doc/2010-12-01/">
  <DeleteIdentityResult/>
  <ResponseMetadata>
    <RequestId>d96bd874-9bf2-11e1-8ee7-c98a0037a2b6</RequestId>
  </ResponseMetadata>
</DeleteIdentityResponse>
```

## DeleteIdentityPolicy

Deletes the specified sending authorization policy for the given identity (an email address or a domain). This API returns successfully even if a policy with the specified name does not exist.

### Note

This API is for the identity owner only. If you have not verified the identity, this API will return an error.

Sending authorization is a feature that enables an identity owner to authorize other senders to use its identities. For information about using sending authorization, see the [Amazon SES Developer Guide](#).

This action is throttled at one request per second.

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

### Identity

The identity that is associated with the policy that you want to delete. You can specify the identity by using its name or by using its Amazon Resource Name (ARN). Examples: `user@example.com`, `example.com`, `arn:aws:ses:us-east-1:123456789012:identity/example.com`.

To successfully call this API, you must own the identity.

Type: String

Required: Yes

### PolicyName

The name of the policy to be deleted.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

## Example

### Sample Request

```
POST / HTTP/1.1
Date: Fri, 15 Jun 2012 20:51:42 GMT
Host: email.us-east-1.amazonaws.com
Content-Type: application/x-www-form-urlencoded
X-Amzn-Authorization: AWS3 AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE,
  Signature=ee9aH6tUW5wBPoh01Tz3w4H+z4avrMmvmRYbfORC7OI=,
  Algorithm=HmacSHA256, SignedHeaders=Date;Host
Content-Length: 173

AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
&Action=DeleteIdentityPolicy
&Identity=user%40example.com
&PolicyName=TestPolicy
&Timestamp=2012-06-15T20%3A51%3A42.000Z
&Version=2010-12-01
```



## Sample Response

```
<DeleteIdentityPolicyResponse xmlns="http://ses.amazonaws.com/doc/2010-12-01/">
  <DeleteIdentityPolicyResult/>
  <ResponseMetadata>
    <RequestId>e038e509-b72a-11e1-901f-1fbd90e8104f</RequestId>
  </ResponseMetadata>
</DeleteIdentityPolicyResponse>
```

## DeleteReceiptFilter

Deletes the specified IP address filter.

For information about managing IP address filters, see the [Amazon SES Developer Guide](#).

This action is throttled at one request per second.

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

### FilterName

The name of the IP address filter to delete.

Type: String

Required: Yes

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

## DeleteReceiptRule

Deletes the specified receipt rule.

For information about managing receipt rules, see the [Amazon SES Developer Guide](#).

This action is throttled at one request per second.

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

### RuleName

The name of the receipt rule to delete.

Type: String

Required: Yes

### RuleSetName

The name of the receipt rule set that contains the receipt rule to delete.

Type: String

Required: Yes

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

### RuleSetDoesNotExist

Indicates that the provided receipt rule set does not exist.

HTTP Status Code: 400

## DeleteReceiptRuleSet

Deletes the specified receipt rule set and all of the receipt rules it contains.

### Note

The currently active rule set cannot be deleted.

For information about managing receipt rule sets, see the [Amazon SES Developer Guide](#).

This action is throttled at one request per second.

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

### RuleSetName

The name of the receipt rule set to delete.

Type: String

Required: Yes

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

### CannotDelete

Indicates that the delete operation could not be completed.

HTTP Status Code: 400

## DeleteVerifiedEmailAddress

Deletes the specified email address from the list of verified addresses.

### Important

The DeleteVerifiedEmailAddress action is deprecated as of the May 15, 2012 release of Domain Verification. The DeletelDentity action is now preferred.

This action is throttled at one request per second.

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

### EmailAddress

An email address to be removed from the list of verified addresses.

Type: String

Required: Yes

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

## Example

### Sample Request

```
POST / HTTP/1.1
Date: Thu, 18 Aug 2011 22:20:50 GMT
Host: email.us-east-1.amazonaws.com
Content-Type: application/x-www-form-urlencoded
X-Amzn-Authorization: AWS3 AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE,
  Signature=Rxzyd6cQe/YjkV4yoQAZ243OzzNjFgrsclizTKwRIRC=,
  Algorithm=HmacSHA256, SignedHeaders=Date;Host
Content-Length: 142

AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
&Action=DeleteVerifiedEmailAddress
&EmailAddress=user%40example.com
&Timestamp=2011-08-18T22%3A20%3A50.000Z
```

### Sample Response

```
<DeleteVerifiedEmailAddressResponse xmlns="http://ses.amazonaws.com/doc/2010-12-01/">
  <ResponseMetadata>
    <RequestId>5634af08-c865-11e0-8986-3f99a698f914</RequestId>
  </ResponseMetadata>
</DeleteVerifiedEmailAddressResponse>
```

**Amazon Simple Email Service API Reference**  
**Example**

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## DescribeActiveReceiptRuleSet

Returns the metadata and receipt rules for the receipt rule set that is currently active. For information about setting up receipt rule sets, see the [Amazon SES Developer Guide](#). This action is throttled at one request per second.

### Response Elements

The following elements are returned by the service.

#### Metadata

The metadata for the currently active receipt rule set. The metadata consists of the rule set name and a timestamp of when the rule set was created.

Type: [ReceiptRuleSetMetadata](#) (p. 94) object

#### Rules.member.N

The receipt rules that belong to the active rule set.

Type: array of [ReceiptRule](#) (p. 93) objects

### Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 104).

## DescribeReceiptRule

Returns the details of the specified receipt rule.

For information about setting up receipt rules, see the [Amazon SES Developer Guide](#).

This action is throttled at one request per second.

### Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

#### **RuleName**

The name of the receipt rule.

Type: String

Required: Yes

#### **RuleSetName**

The name of the receipt rule set to which the receipt rule belongs.

Type: String

Required: Yes

### Response Elements

The following element is returned by the service.

#### **Rule**

A data structure that contains the specified receipt rule's name, actions, recipients, domains, enabled status, scan status, and Transport Layer Security (TLS) policy.

Type: [ReceiptRule \(p. 93\)](#) object

### Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

#### **RuleDoesNotExist**

Indicates that the provided receipt rule does not exist.

HTTP Status Code: 400

#### **RuleSetDoesNotExist**

Indicates that the provided receipt rule set does not exist.

HTTP Status Code: 400



## DescribeReceiptRuleSet

Returns the details of the specified receipt rule set.

For information about managing receipt rule sets, see the [Amazon SES Developer Guide](#).

This action is throttled at one request per second.

### Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

#### **RuleSetName**

The name of the receipt rule set to describe.

Type: String

Required: Yes

### Response Elements

The following elements are returned by the service.

#### **Metadata**

The metadata for the receipt rule set, which consists of the rule set name and the timestamp of when the rule set was created.

Type: [ReceiptRuleSetMetadata \(p. 94\)](#) object

#### **Rules.member.N**

A list of the receipt rules that belong to the specified receipt rule set.

Type: array of [ReceiptRule \(p. 93\)](#) objects

### Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

#### **RuleSetDoesNotExist**

Indicates that the provided receipt rule set does not exist.

HTTP Status Code: 400

## GetIdentityDkimAttributes

Returns the current status of Easy DKIM signing for an entity. For domain name identities, this action also returns the DKIM tokens that are required for Easy DKIM signing, and whether Amazon SES has successfully verified that these tokens have been published.

This action takes a list of identities as input and returns the following information for each:

- Whether Easy DKIM signing is enabled or disabled.
- A set of DKIM tokens that represent the identity. If the identity is an email address, the tokens represent the domain of that address.
- Whether Amazon SES has successfully verified the DKIM tokens published in the domain's DNS. This information is only returned for domain name identities, not for email addresses.

This action is throttled at one request per second and can only get DKIM attributes for up to 100 identities at a time.

For more information about creating DNS records using DKIM tokens, go to the [Amazon SES Developer Guide](#).

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

### **Identities.member.N**

A list of one or more verified identities - email addresses, domains, or both.

Type: array of Strings

Required: Yes

## Response Elements

The following element is returned by the service.

**DkimAttributes** , DkimAttributes.entry.N.key (key), DkimAttributesentry.N.value (value)

The DKIM attributes for an email address or a domain.

Type: String to [IdentityDkimAttributes \(p. 82\)](#) object map

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

## Example

### Sample Request

```
POST / HTTP/1.1
Date: Fri, 29 Jun 2012 22:41:32 GMT
Host: email.us-east-1.amazonaws.com
Content-Type: application/x-www-form-urlencoded
X-Amzn-Authorization: AWS3 AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE,
  Signature=MJdhrIAt3c4BRC6jdzueMM+AJLEx17bnIHjZwlSenyk=,
  Algorithm=HmacSHA256, SignedHeaders=Date;Host
```

```
Content-Length: 165
```

```
AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE  
&Action=GetIdentityDkimAttributes  
&Identities.member.1=example.com  
&Timestamp=2012-06-29T22%3A41%3A32.000Z  
&Version=2010-12-01
```

## Sample Response

```
<GetIdentityDkimAttributesResponse xmlns="http://ses.amazonaws.com/doc/2010-12-01/">  
  <GetIdentityDkimAttributesResult>  
    <DkimAttributes>  
      <entry>  
        <key>amazon.com</key>  
        <value>  
          <DkimEnabled>true</DkimEnabled>  
          <DkimVerificationStatus>Success</DkimVerificationStatus>  
          <DkimTokens>  
            <member>vvjuipp74whm76gqoni7qmw4w4qusjiainivf6f</member>  
            <member>3frqe7jn4obpuxjpwpolz6ipb3k5nvt2nhjpik2oy</member>  
            <member>wrqplteh7oodxnad7hsl4mixg2uavznezv5sxi2</member>  
          </DkimTokens>  
        </value>  
      </entry>  
    </DkimAttributes>  
  </GetIdentityDkimAttributesResult>  
  <ResponseMetadata>  
    <RequestId>bb5a105d-c468-11e1-82eb-dff885ccc06a</RequestId>  
  </ResponseMetadata>  
</GetIdentityDkimAttributesResponse>
```

## GetIdentityMailFromDomainAttributes

Returns the custom MAIL FROM attributes for a list of identities (email addresses and/or domains). This action is throttled at one request per second and can only get custom MAIL FROM attributes for up to 100 identities at a time.

### Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

#### **Identities.member.N**

A list of one or more identities.

Type: array of Strings

Required: Yes

### Response Elements

The following element is returned by the service.

**MailFromDomainAttributes** , MailFromDomainAttributes.entry.N.key (key),  
MailFromDomainAttributesentry.N.value (value)

A map of identities to custom MAIL FROM attributes.

Type: String to [IdentityMailFromDomainAttributes \(p. 83\)](#) object map

### Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

## GetIdentityNotificationAttributes

Given a list of verified identities (email addresses and/or domains), returns a structure describing identity notification attributes.

This action is throttled at one request per second and can only get notification attributes for up to 100 identities at a time.

For more information about using notifications with Amazon SES, see the [Amazon SES Developer Guide](#).

### Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

#### **Identities.member.N**

A list of one or more identities. You can specify an identity by using its name or by using its Amazon Resource Name (ARN). Examples: `user@example.com`, `example.com`, `arn:aws:ses:us-east-1:123456789012:identity/example.com`.

Type: array of Strings

Required: Yes

### Response Elements

The following element is returned by the service.

**NotificationAttributes**, NotificationAttributes.entry.N.key (key), NotificationAttributesentry.N.value (value)

A map of Identity to IdentityNotificationAttributes.

Type: String to [IdentityNotificationAttributes \(p. 84\)](#) object map

### Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

### Example

#### Sample Request

```
POST / HTTP/1.1
Date: Fri, 15 Jun 2012 20:51:42 GMT
Host: email.us-east-1.amazonaws.com
Content-Type: application/x-www-form-urlencoded
X-Amzn-Authorization: AWS3 AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE,
  Signature=ee9aH6tUW5wBPoh01Tz3w4H+z4avrMvmRYbfORC7OI=,
  Algorithm=HmacSHA256, SignedHeaders=Date;Host
Content-Length: 173

AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
&Action=GetIdentityNotificationAttributes
&Identities.member.1=user%40example.com
&Timestamp=2012-06-15T20%3A51%3A42.000Z
&Version=2010-12-01
```

## Sample Response

```
<GetIdentityNotificationAttributesResponse xmlns="http://ses.amazon
aws.com/doc/2010-12-01/">
  <GetIdentityNotificationAttributesResult>
    <NotificationAttributes>
      <entry>
        <key>user@example.com</key>
        <value>
          <ForwardingEnabled>true</ForwardingEnabled>
          <BounceTopic>arn:aws:sns:us-east-1:123456789012:example</BounceTopic>
          <ComplaintTopic>arn:aws:sns:us-east-1:123456789012:example</Complaint
Topic>
          <DeliveryTopic>arn:aws:sns:us-east-1:123456789012:example</DeliveryTop
ic>
        </value>
      </entry>
    </NotificationAttributes>
  </GetIdentityNotificationAttributesResult>
  <ResponseMetadata>
    <RequestId>e038e509-b72a-11e1-901f-1fbd90e8104f</RequestId>
  </ResponseMetadata>
</GetIdentityNotificationAttributesResponse>
```

## GetIdentityPolicies

Returns the requested sending authorization policies for the given identity (an email address or a domain). The policies are returned as a map of policy names to policy contents. You can retrieve a maximum of 20 policies at a time.

### Note

This API is for the identity owner only. If you have not verified the identity, this API will return an error.

Sending authorization is a feature that enables an identity owner to authorize other senders to use its identities. For information about using sending authorization, see the [Amazon SES Developer Guide](#). This action is throttled at one request per second.

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

### Identity

The identity for which the policies will be retrieved. You can specify an identity by using its name or by using its Amazon Resource Name (ARN). Examples: `user@example.com`, `example.com`, `arn:aws:ses:us-east-1:123456789012:identity/example.com`.

To successfully call this API, you must own the identity.

Type: String

Required: Yes

### PolicyNames.member.N

A list of the names of policies to be retrieved. You can retrieve a maximum of 20 policies at a time.

If you do not know the names of the policies that are attached to the identity, you can use `ListIdentityPolicies`.

Type: array of Strings

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Elements

The following element is returned by the service.

**Policies** , Policies.entry.N.key (key), Policiesentry.N.value (value)

A map of policy names to policies.

Type: String to String map

Length Constraints: Minimum length of 1.

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

## Example

### Sample Request

```
POST / HTTP/1.1
Date: Fri, 15 Jun 2012 20:51:42 GMT
```

## Amazon Simple Email Service API Reference Example

---

```
Host: email.us-east-1.amazonaws.com
Content-Type: application/x-www-form-urlencoded
X-Amzn-Authorization: AWS3 AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE,
  Signature=ee9aH6tUW5wBPoh01Tz3w4H+z4avrMmvmRYbfORC7OI=,
  Algorithm=HmacSHA256, SignedHeaders=Date;Host
Content-Length: 173
```

```
AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
&Action=GetIdentityPolicies
&Identity=user%40example.com
&PolicyNames.member.1=TestPolicy1
&PolicyNames.member.1=TestPolicy2
&Timestamp=2012-06-15T20%3A51%3A42.000Z
&Version=2010-12-01
```

### Sample Response

```
<GetIdentityPoliciesResponse xmlns="http://ses.amazonaws.com/doc/2010-12-01/">
  <GetIdentityPoliciesResult>
    <Policies>
      <entry>
        <key>TestPolicy1</key>
        <value>%7B%7D</value>
      </entry>
      <entry>
        <key>TestPolicy2</key>
        <value>%7B%7D</value>
      </entry>
    </Policies>
  </GetIdentityPoliciesResult>
  <ResponseMetadata>
    <RequestId>e038e509-b72a-11e1-901f-1fbd90e8104f</RequestId>
  </ResponseMetadata>
</GetIdentityPoliciesResponse>
```



## GetIdentityVerificationAttributes

Given a list of identities (email addresses and/or domains), returns the verification status and (for domain identities) the verification token for each identity.

This action is throttled at one request per second and can only get verification attributes for up to 100 identities at a time.

### Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

#### **Identities.member.N**

A list of identities.

Type: array of Strings

Required: Yes

### Response Elements

The following element is returned by the service.

**VerificationAttributes**, VerificationAttributes.entry.N.key (key), VerificationAttributesentry.N.value (value)

A map of Identities to IdentityVerificationAttributes objects.

Type: String to [IdentityVerificationAttributes \(p. 85\)](#) object map

### Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

### Example

#### Sample Request

```
POST / HTTP/1.1
Date: Sat, 12 May 2012 05:27:54 GMT
Host: email.us-east-1.amazonaws.com
Content-Type: application/x-www-form-urlencoded
X-Amzn-Authorization: AWS3 AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE,
  Signature=3+KQ4VHx991T7Kb41HmFcZJxuHz4/6mf2H5Fxy+tuLc=,
  Algorithm=HmacSHA256, SignedHeaders=Date;Host
Content-Length: 203

AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
&Action=GetIdentityVerificationAttributes
&Identities.member.1=user%40domain.com
&Identities.member.2=domain.com
&Timestamp=2012-05-12T05%3A27%3A54.000Z
&Version=2010-12-01
```

## Sample Response

```
<GetIdentityVerificationAttributesResponse xmlns="http://ses.amazonaws.com/doc/2010-12-01/">
  <GetIdentityVerificationAttributesResult>
    <VerificationAttributes>
      <entry>
        <key>domain.com</key>
        <value>
          <VerificationStatus>Pending</VerificationStatus>
          <VerificationToken>QTKknzFg2J4ygwa+XvHAXUllhyHoY0gVfZdfjIedHZ0=</VerificationToken>
        </value>
      </entry>
      <entry>
        <key>user@domain.com</key>
        <value>
          <VerificationStatus>Pending</VerificationStatus>
        </value>
      </entry>
    </VerificationAttributes>
  </GetIdentityVerificationAttributesResult>
  <ResponseMetadata>
    <RequestId>1d0c29f1-9bf3-11e1-8ee7-c98a0037a2b6</RequestId>
  </ResponseMetadata>
</GetIdentityVerificationAttributesResponse>
```

## GetSendQuota

Returns the user's current sending limits.  
This action is throttled at one request per second.

### Response Elements

The following elements are returned by the service.

#### Max24HourSend

The maximum number of emails the user is allowed to send in a 24-hour interval. A value of -1 signifies an unlimited quota.

Type: Double

#### MaxSendRate

The maximum number of emails that Amazon SES can accept from the user's account per second.

##### Note

The rate at which Amazon SES accepts the user's messages might be less than the maximum send rate.

Type: Double

#### SentLast24Hours

The number of emails sent during the previous 24 hours.

Type: Double

### Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

### Example

#### Sample Request

```
POST / HTTP/1.1
Date: Thu, 18 Aug 2011 22:22:36 GMT
Host: email.us-east-1.amazonaws.com
Content-Type: application/x-www-form-urlencoded
X-Amzn-Authorization: AWS3 AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE,
  Signature=W1ydiNOtf0jN3t7Lv63qhz7UZc3RrcmQpkGbopvnj/Y=,
  Algorithm=HmacSHA256, SignedHeaders=Date;Host
Content-Length: 94

AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
&Action=GetSendQuota
&Timestamp=2011-08-18T22%3A22%3A36.000Z
```

#### Sample Response

## Amazon Simple Email Service API Reference Example

---

```
<GetSendQuotaResponse xmlns="http://ses.amazonaws.com/doc/2010-12-01/">
  <GetSendQuotaResult>
    <SentLast24Hours>127.0</SentLast24Hours>
    <Max24HourSend>200.0</Max24HourSend>
    <MaxSendRate>1.0</MaxSendRate>
  </GetSendQuotaResult>
  <ResponseMetadata>
    <RequestId>273021c6-c866-11e0-b926-699e21c3af9e</RequestId>
  </ResponseMetadata>
</GetSendQuotaResponse>
```

## GetSendStatistics

Returns the user's sending statistics. The result is a list of data points, representing the last two weeks of sending activity.

Each data point in the list contains statistics for a 15-minute interval.

This action is throttled at one request per second.

## Response Elements

The following element is returned by the service.

### **SendDataPoints.member.N**

A list of data points, each of which represents 15 minutes of activity.

Type: array of [SendDataPoint](#) (p. 98) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 104).

## Example

### Sample Request

```
POST / HTTP/1.1
Date: Thu, 18 Aug 2011 22:23:01 GMT
Host: email.us-east-1.amazonaws.com
Content-Type: application/x-www-form-urlencoded
X-Amzn-Authorization: AWS3 AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE,
  Signature=kwuk4eraA9HSfHySflgDKR6xK0JXjATIE7Uu5/FB4x4=,
  Algorithm=HmacSHA256, SignedHeaders=Date;Host
Content-Length: 99

AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
&Action=GetSendStatistics
&Timestamp=2011-08-18T22%3A23%3A01.000Z
```

### Sample Response

```
<GetSendStatisticsResponse xmlns="http://ses.amazonaws.com/doc/2010-12-01/">
  <GetSendStatisticsResult>
    <SendDataPoints>
      <member>
        <DeliveryAttempts>8</DeliveryAttempts>
        <Timestamp>2011-08-03T19:23:00Z</Timestamp>
        <Rejects>0</Rejects>
        <Bounces>0</Bounces>
        <Complaints>0</Complaints>
      </member>
    </SendDataPoints>
  </GetSendStatisticsResult>
</GetSendStatisticsResponse>
```

## Amazon Simple Email Service API Reference Example

---

```
<member>
  <DeliveryAttempts>7</DeliveryAttempts>
  <Timestamp>2011-08-03T06:53:00Z</Timestamp>
  <Rejects>0</Rejects>
  <Bounces>0</Bounces>
  <Complaints>0</Complaints>
</member>
.
.
.
</GetSendStatisticsResult>
<ResponseMetadata>
  <RequestId>c2b66ee5-c866-11e0-b17f-cddb0ab334db</RequestId>
</ResponseMetadata>
</GetSendStatisticsResponse>
```

## ListIdentities

Returns a list containing all of the identities (email addresses and domains) for your AWS account, regardless of verification status.

This action is throttled at one request per second.

### Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

#### IdentityType

The type of the identities to list. Possible values are "EmailAddress" and "Domain". If this parameter is omitted, then all identities will be listed.

Type: String

Valid Values: `EmailAddress` | `Domain`

Required: No

#### MaxItems

The maximum number of identities per page. Possible values are 1-1000 inclusive.

Type: Integer

Required: No

#### NextToken

The token to use for pagination.

Type: String

Required: No

### Response Elements

The following elements are returned by the service.

#### Identities.member.N

A list of identities.

Type: array of Strings

#### NextToken

The token used for pagination.

Type: String

### Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

### Example

#### Sample Request

```
POST / HTTP/1.1
Date: Sat, 12 May 2012 05:18:45 GMT
Host: email.us-east-1.amazonaws.com
Content-Type: application/x-www-form-urlencoded
X-Amzn-Authorization: AWS3 AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE,
Signature=OruiFNV26DCZicLDaQmULHGbjBU8Mbc/c5aIo/MMIuM=,
```

```
Algorithm=HmacSHA256, SignedHeaders=Date;Host
Content-Length: 115

AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
&Action=ListIdentities
&Timestamp=2012-05-12T05%3A18%3A45.000Z&
Version=2010-12-01
```

## Sample Response

```
<ListIdentitiesResponse xmlns="http://ses.amazonaws.com/doc/2010-12-01/">
  <ListIdentitiesResult>
    <Identities>
      <member>example.com</member>
      <member>user@example.com</member>
    </Identities>
  </ListIdentitiesResult>
  <ResponseMetadata>
    <RequestId>cacecf23-9bf1-11e1-9279-0100e8cf109a</RequestId>
  </ResponseMetadata>
</ListIdentitiesResponse>
```



## ListIdentityPolicies

Returns a list of sending authorization policies that are attached to the given identity (an email address or a domain). This API returns only a list. If you want the actual policy content, you can use `GetIdentityPolicies`.

### Note

This API is for the identity owner only. If you have not verified the identity, this API will return an error.

Sending authorization is a feature that enables an identity owner to authorize other senders to use its identities. For information about using sending authorization, see the [Amazon SES Developer Guide](#).

This action is throttled at one request per second.

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

### Identity

The identity that is associated with the policy for which the policies will be listed. You can specify an identity by using its name or by using its Amazon Resource Name (ARN). Examples:

`user@example.com`, `example.com`,

`arn:aws:ses:us-east-1:123456789012:identity/example.com`.

To successfully call this API, you must own the identity.

Type: String

Required: Yes

## Response Elements

The following element is returned by the service.

### PolicyNames.member.N

A list of names of policies that apply to the specified identity.

Type: array of Strings

Length Constraints: Minimum length of 1. Maximum length of 64.

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

## Example

### Sample Request

```
POST / HTTP/1.1
Date: Fri, 15 Jun 2012 20:51:42 GMT
Host: email.us-east-1.amazonaws.com
Content-Type: application/x-www-form-urlencoded
X-Amzn-Authorization: AWS3 AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE,
  Signature=ee9aH6tUW5wBPoh01Tz3w4H+z4avrMmvmRYbfORC7OI=,
  Algorithm=HmacSHA256, SignedHeaders=Date;Host
Content-Length: 173
```

```
AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
&Action=ListIdentityPolicies
&Identity=user%40example.com
&Timestamp=2012-06-15T20%3A51%3A42.000Z
&Version=2010-12-01
```

## Sample Response

```
<ListIdentityPoliciesResponse xmlns="http://ses.amazonaws.com/doc/2010-12-01/">

  <ListIdentityPoliciesResult>
    <PolicyNames>
      <member>TestPolicy1</member>
      <member>TestPolicy2</member>
      <member>TestPolicy3</member>
    </PolicyNames>
  </ListIdentityPoliciesResult>
  <ResponseMetadata>
    <RequestId>e038e509-b72a-11e1-901f-1fbd90e8104f</RequestId>
  </ResponseMetadata>
</ListIdentityPoliciesResponse>
```

## ListReceiptFilters

Lists the IP address filters associated with your AWS account.

For information about managing IP address filters, see the [Amazon SES Developer Guide](#).

This action is throttled at one request per second.

## Response Elements

The following element is returned by the service.

### **Filters.member.N**

A list of IP address filter data structures, which each consist of a name, an IP address range, and whether to allow or block mail from it.

Type: array of [ReceiptFilter \(p. 91\)](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

## ListReceiptRuleSets

Lists the receipt rule sets that exist under your AWS account. If there are additional receipt rule sets to be retrieved, you will receive a `NextToken` that you can provide to the next call to `ListReceiptRuleSets` to retrieve the additional entries.

For information about managing receipt rule sets, see the [Amazon SES Developer Guide](#).

This action is throttled at one request per second.

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

### NextToken

A token returned from a previous call to `ListReceiptRuleSets` to indicate the position in the receipt rule set list.

Type: String

Required: No

## Response Elements

The following elements are returned by the service.

### NextToken

A token indicating that there are additional receipt rule sets available to be listed. Pass this token to successive calls of `ListReceiptRuleSets` to retrieve up to 100 receipt rule sets at a time.

Type: String

### RuleSets.member.N

The metadata for the currently active receipt rule set. The metadata consists of the rule set name and the timestamp of when the rule set was created.

Type: array of [ReceiptRuleSetMetadata \(p. 94\)](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

## ListVerifiedEmailAddresses

Returns a list containing all of the email addresses that have been verified.

### Important

The ListVerifiedEmailAddresses action is deprecated as of the May 15, 2012 release of Domain Verification. The ListIdentities action is now preferred.

This action is throttled at one request per second.

## Response Elements

The following element is returned by the service.

### VerifiedEmailAddresses.member.N

A list of email addresses that have been verified.

Type: array of Strings

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

## Example

### Sample Request

```
POST / HTTP/1.1
Date: Thu, 18 Aug 2011 22:05:09 GMT
Host: email.us-east-1.amazonaws.com
Content-Type: application/x-www-form-urlencoded
X-Amzn-Authorization: AWS3 AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE,
  Signature=IIIO+vvDKGMv71vToBwzR6vZlhxe/VUE8tWEFUNTUqgE=,
  Algorithm=HmacSHA256, SignedHeaders=Date;Host
Content-Length: 108

AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
&Action=ListVerifiedEmailAddresses
&Timestamp=2011-08-18T22%3A05%3A09.000Z%
```

### Sample Response

```
<ListVerifiedEmailAddressesResponse xmlns="http://ses.amazonaws.com/doc/2010-12-01/">
  <ListVerifiedEmailAddressesResult>
    <VerifiedEmailAddresses>
      <member>example@amazon.com</member>
    </VerifiedEmailAddresses>
  </ListVerifiedEmailAddressesResult>
  <ResponseMetadata>
```

## Amazon Simple Email Service API Reference Example

---

```
<RequestId>3dd50e97-c865-11e0-b235-099eb63d928d</RequestId>  
</ResponseMetadata>  
</ListVerifiedEmailAddressesResponse>
```

## PutIdentityPolicy

Adds or updates a sending authorization policy for the specified identity (an email address or a domain).

### Note

This API is for the identity owner only. If you have not verified the identity, this API will return an error.

Sending authorization is a feature that enables an identity owner to authorize other senders to use its identities. For information about using sending authorization, see the [Amazon SES Developer Guide](#).

This action is throttled at one request per second.

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

### Identity

The identity to which the policy will apply. You can specify an identity by using its name or by using its Amazon Resource Name (ARN). Examples: `user@example.com`, `example.com`, `arn:aws:ses:us-east-1:123456789012:identity/example.com`.

To successfully call this API, you must own the identity.

Type: String

Required: Yes

### Policy

The text of the policy in JSON format. The policy cannot exceed 4 KB.

For information about the syntax of sending authorization policies, see the [Amazon SES Developer Guide](#).

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### PolicyName

The name of the policy.

The policy name cannot exceed 64 characters and can only include alphanumeric characters, dashes, and underscores.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

### InvalidPolicy

Indicates that the provided policy is invalid. Check the error stack for more information about what caused the error.

HTTP Status Code: 400

## Example

### Sample Request

```
POST / HTTP/1.1
Date: Fri, 15 Jun 2012 20:51:42 GMT
Host: email.us-east-1.amazonaws.com
Content-Type: application/x-www-form-urlencoded
X-Amzn-Authorization: AWS3 AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE,
  Signature=ee9aH6tUW5wBPoh01Tz3w4H+z4avrMmvmRYbfORC7OI=,
  Algorithm=HmacSHA256, SignedHeaders=Date;Host
Content-Length: 173

AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
&Action=PutIdentityPolicy
&Identity=user%40example.com
&PolicyName=TestPolicy
&Policy=%7B%7D
&Timestamp=2012-06-15T20%3A51%3A42.000Z
&Version=2010-12-01
```

### Sample Response

```
<PutIdentityPolicyResponse xmlns="http://ses.amazonaws.com/doc/2010-12-01/">
  <PutIdentityPolicyResult/>
  <ResponseMetadata>
    <RequestId>e038e509-b72a-11e1-901f-1fbd90e8104f</RequestId>
  </ResponseMetadata>
</PutIdentityPolicyResponse>
```



# ReorderReceiptRuleSet

Reorders the receipt rules within a receipt rule set.

## Note

All of the rules in the rule set must be represented in this request. That is, this API will return an error if the reorder request doesn't explicitly position all of the rules.

For information about managing receipt rule sets, see the [Amazon SES Developer Guide](#).

This action is throttled at one request per second.

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

### RuleNames.member.N

A list of the specified receipt rule set's receipt rules in the order that you want to put them.

Type: array of Strings

Required: Yes

### RuleSetName

The name of the receipt rule set to reorder.

Type: String

Required: Yes

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

### RuleDoesNotExist

Indicates that the provided receipt rule does not exist.

HTTP Status Code: 400

### RuleSetDoesNotExist

Indicates that the provided receipt rule set does not exist.

HTTP Status Code: 400

## SendBounce

Generates and sends a bounce message to the sender of an email you received through Amazon SES. You can only use this API on an email up to 24 hours after you receive it.

### Note

You cannot use this API to send generic bounces for mail that was not received by Amazon SES.

For information about receiving email through Amazon SES, see the [Amazon SES Developer Guide](#).

This action is throttled at one request per second.

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

### **BouncedRecipientInfoList.member.N**

A list of recipients of the bounced message, including the information required to create the Delivery Status Notifications (DSNs) for the recipients. You must specify at least one `BouncedRecipientInfo` in the list.

Type: array of [BouncedRecipientInfo \(p. 78\)](#) objects

Required: Yes

### **BounceSender**

The address to use in the "From" header of the bounce message. This must be an identity that you have verified with Amazon SES.

Type: String

Required: Yes

### **BounceSenderArn**

This parameter is used only for sending authorization. It is the ARN of the identity that is associated with the sending authorization policy that permits you to use the address in the "From" header of the bounce. For more information about sending authorization, see the [Amazon SES Developer Guide](#).

Type: String

Required: No

### **Explanation**

Human-readable text for the bounce message to explain the failure. If not specified, the text will be auto-generated based on the bounced recipient information.

Type: String

Required: No

### **MessageDsn**

Message-related DSN fields. If not specified, Amazon SES will choose the values.

Type: [MessageDsn \(p. 88\)](#) object

Required: No

### **OriginalMessageId**

The message ID of the message to be bounced.

Type: String

Required: Yes

## Response Elements

The following element is returned by the service.

### **MessageId**

The message ID of the bounce message.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

### **MessageRejected**

Indicates that the action failed, and the message could not be sent. Check the error stack for more information about what caused the error.

HTTP Status Code: 400

## SendEmail

Composes an email message based on input data, and then immediately queues the message for sending. There are several important points to know about `SendEmail`:

- You can only send email from verified email addresses and domains; otherwise, you will get an "Email address not verified" error. If your account is still in the Amazon SES sandbox, you must also verify every recipient email address except for the recipients provided by the Amazon SES mailbox simulator. For more information, go to the [Amazon SES Developer Guide](#).
- The total size of the message cannot exceed 10 MB. This includes any attachments that are part of the message.
- Amazon SES has a limit on the total number of recipients per message. The combined number of To:, CC: and BCC: email addresses cannot exceed 50. If you need to send an email message to a larger audience, you can divide your recipient list into groups of 50 or fewer, and then call Amazon SES repeatedly to send the message to each group.
- For every message that you send, the total number of recipients (To:, CC: and BCC:) is counted against your sending quota - the maximum number of emails you can send in a 24-hour period. For information about your sending quota, go to the [Amazon SES Developer Guide](#).

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

### Destination

The destination for this email, composed of To:, CC:, and BCC: fields.

Type: [Destination \(p. 80\)](#) object

Required: Yes

### Message

The message to be sent.

Type: [Message \(p. 87\)](#) object

Required: Yes

### ReplyToAddresses.member.N

The reply-to email address(es) for the message. If the recipient replies to the message, each reply-to address will receive the reply.

Type: array of Strings

Required: No

### ReturnPath

The email address to which bounces and complaints are to be forwarded when feedback forwarding is enabled. If the message cannot be delivered to the recipient, then an error message will be returned from the recipient's ISP; this message will then be forwarded to the email address specified by the `ReturnPath` parameter. The `ReturnPath` parameter is never overwritten. This email address must be either individually verified with Amazon SES, or from a domain that has been verified with Amazon SES.

Type: String

Required: No

### ReturnPathArn

This parameter is used only for sending authorization. It is the ARN of the identity that is associated with the sending authorization policy that permits you to use the email address specified in the `ReturnPath` parameter.

For example, if the owner of `example.com` (which has ARN

`arn:aws:ses:us-east-1:123456789012:identity/example.com`) attaches a policy to it that authorizes you to use `feedback@example.com`, then you would specify the `ReturnPathArn` to

be `arn:aws:ses:us-east-1:123456789012:identity/example.com`, and the `ReturnPath` to be `feedback@example.com`.

For more information about sending authorization, see the [Amazon SES Developer Guide](#).

Type: String

Required: No

#### Source

The email address that is sending the email. This email address must be either individually verified with Amazon SES, or from a domain that has been verified with Amazon SES. For information about verifying identities, see the [Amazon SES Developer Guide](#).

If you are sending on behalf of another user and have been permitted to do so by a sending authorization policy, then you must also specify the `SourceArn` parameter. For more information about sending authorization, see the [Amazon SES Developer Guide](#).

In all cases, the email address must be 7-bit ASCII. If the text must contain any other characters, then you must use MIME encoded-word syntax (RFC 2047) instead of a literal string. MIME encoded-word syntax uses the following form: `=?charset?encoding?encoded-text?='`. For more information, see [RFC 2047](#).

Type: String

Required: Yes

#### SourceArn

This parameter is used only for sending authorization. It is the ARN of the identity that is associated with the sending authorization policy that permits you to send for the email address specified in the `Source` parameter.

For example, if the owner of `example.com` (which has ARN `arn:aws:ses:us-east-1:123456789012:identity/example.com`) attaches a policy to it that authorizes you to send from `user@example.com`, then you would specify the `SourceArn` to be `arn:aws:ses:us-east-1:123456789012:identity/example.com`, and the `Source` to be `user@example.com`.

For more information about sending authorization, see the [Amazon SES Developer Guide](#).

Type: String

Required: No

## Response Elements

The following element is returned by the service.

#### MessageId

The unique message identifier returned from the `SendEmail` action.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

#### MailFromDomainNotVerified

Indicates that the message could not be sent because Amazon SES could not read the MX record required to use the specified MAIL FROM domain. For information about editing the custom MAIL FROM domain settings for an identity, see the [Amazon SES Developer Guide](#).

HTTP Status Code: 400

#### MessageRejected

Indicates that the action failed, and the message could not be sent. Check the error stack for more information about what caused the error.

HTTP Status Code: 400

## Example

### Sample Request

```
POST / HTTP/1.1
Date: Thu, 18 Aug 2011 22:25:27 GMT
Host: email.us-east-1.amazonaws.com
Content-Type: application/x-www-form-urlencoded
X-Amzn-Authorization: AWS3 AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE,
  Signature=yXx/wM1bESLuDerJ6HpZg9JK8Gjau7EUE4FWEfmhodo=,
  Algorithm=HmacSHA256, SignedHeaders=Date;Host
Content-Length: 230

AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
&Action=SendEmail
&Destination.ToAddresses.member.1=allan%40example.com
&Message.Body.Text.Data=body
&Message.Subject.Data=Example
&Source=user%40example.com
&SourceArn=arn%3Aaws%3Aeses%3Aus-east-1%3A999999999999%3Aidentity/example.com
&Timestamp=2011-08-18T22%3A25%3A27.000Z
```

### Sample Response

```
<SendEmailResponse xmlns="http://ses.amazonaws.com/doc/2010-12-01/">
  <SendEmailResult>
    <MessageId>00000131d51d2292-159ad6eb-077c-46e6-ad09-ae7c05925ed4-
000000</MessageId>
  </SendEmailResult>
  <ResponseMetadata>
    <RequestId>d5964849-c866-11e0-9beb-01a62d68c57f</RequestId>
  </ResponseMetadata>
</SendEmailResponse>
```

## SendRawEmail

Sends an email message, with header and content specified by the client. The `SendRawEmail` action is useful for sending multipart MIME emails. The raw text of the message must comply with Internet email standards; otherwise, the message cannot be sent.

There are several important points to know about `SendRawEmail`:

- You can only send email from verified email addresses and domains; otherwise, you will get an "Email address not verified" error. If your account is still in the Amazon SES sandbox, you must also verify every recipient email address except for the recipients provided by the Amazon SES mailbox simulator. For more information, go to the [Amazon SES Developer Guide](#).
- The total size of the message cannot exceed 10 MB. This includes any attachments that are part of the message.
- Amazon SES has a limit on the total number of recipients per message. The combined number of To:, CC: and BCC: email addresses cannot exceed 50. If you need to send an email message to a larger audience, you can divide your recipient list into groups of 50 or fewer, and then call Amazon SES repeatedly to send the message to each group.
- The To:, CC:, and BCC: headers in the raw message can contain a group list. Note that each recipient in a group list counts towards the 50-recipient limit.
- Amazon SES overrides any Message-ID and Date headers you provide.
- For every message that you send, the total number of recipients (To:, CC: and BCC:) is counted against your sending quota - the maximum number of emails you can send in a 24-hour period. For information about your sending quota, go to the [Amazon SES Developer Guide](#).
- If you are using sending authorization to send on behalf of another user, `SendRawEmail` enables you to specify the cross-account identity for the email's "Source," "From," and "Return-Path" parameters in one of two ways: you can pass optional parameters `SourceArn`, `FromArn`, and/or `ReturnPathArn` to the API, or you can include the following X-headers in the header of your raw email:
  - X-SES-SOURCE-ARN
  - X-SES-FROM-ARN
  - X-SES-RETURN-PATH-ARN

### Important

Do not include these X-headers in the DKIM signature, because they are removed by Amazon SES before sending the email.

For the most common sending authorization use case, we recommend that you specify the `SourceIdentityArn` and do not specify either the `FromIdentityArn` or `ReturnPathIdentityArn`. (The same note applies to the corresponding X-headers.) If you only specify the `SourceIdentityArn`, Amazon SES will simply set the "From" address and the "Return Path" address to the identity specified in `SourceIdentityArn`. For more information about sending authorization, see the [Amazon SES Developer Guide](#).

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

### **Destinations.member.N**

A list of destinations for the message, consisting of To:, CC:, and BCC: addresses.

Type: array of Strings

Required: No

### FromArn

This parameter is used only for sending authorization. It is the ARN of the identity that is associated with the sending authorization policy that permits you to specify a particular "From" address in the header of the raw email.

Instead of using this parameter, you can use the X-header `X-SES-FROM-ARN` in the raw message of the email. If you use both the `FromArn` parameter and the corresponding X-header, Amazon SES uses the value of the `FromArn` parameter.

#### Note

For information about when to use this parameter, see the description of `SendRawEmail` in this guide, or see the [Amazon SES Developer Guide](#).

Type: String

Required: No

### RawMessage

The raw text of the message. The client is responsible for ensuring the following:

- Message must contain a header and a body, separated by a blank line.
- All required header fields must be present.
- Each part of a multipart MIME message must be formatted properly.
- MIME content types must be among those supported by Amazon SES. For more information, go to the [Amazon SES Developer Guide](#).
- Must be base64-encoded.

Type: [RawMessage \(p. 89\)](#) object

Required: Yes

### ReturnPathArn

This parameter is used only for sending authorization. It is the ARN of the identity that is associated with the sending authorization policy that permits you to use the email address specified in the `ReturnPath` parameter.

For example, if the owner of `example.com` (which has ARN `arn:aws:ses:us-east-1:123456789012:identity/example.com`) attaches a policy to it that authorizes you to use `feedback@example.com`, then you would specify the `ReturnPathArn` to be `arn:aws:ses:us-east-1:123456789012:identity/example.com`, and the `ReturnPath` to be `feedback@example.com`.

Instead of using this parameter, you can use the X-header `X-SES-RETURN-PATH-ARN` in the raw message of the email. If you use both the `ReturnPathArn` parameter and the corresponding X-header, Amazon SES uses the value of the `ReturnPathArn` parameter.

#### Note

For information about when to use this parameter, see the description of `SendRawEmail` in this guide, or see the [Amazon SES Developer Guide](#).

Type: String

Required: No

### Source

The identity's email address. If you do not provide a value for this parameter, you must specify a "From" address in the raw text of the message. (You can also specify both.)

By default, the string must be 7-bit ASCII. If the text must contain any other characters, then you must use MIME encoded-word syntax (RFC 2047) instead of a literal string. MIME encoded-word syntax uses the following form: `=?charset?encoding?encoded-text?='`. For more information, see [RFC 2047](#).

#### Note

If you specify the `Source` parameter and have feedback forwarding enabled, then bounces and complaints will be sent to this email address. This takes precedence over any `Return-Path` header that you might include in the raw text of the message.

Type: String



Required: No

### SourceArn

This parameter is used only for sending authorization. It is the ARN of the identity that is associated with the sending authorization policy that permits you to send for the email address specified in the `Source` parameter.

For example, if the owner of `example.com` (which has ARN `arn:aws:ses:us-east-1:123456789012:identity/example.com`) attaches a policy to it that authorizes you to send from `user@example.com`, then you would specify the `SourceArn` to be `arn:aws:ses:us-east-1:123456789012:identity/example.com`, and the `Source` to be `user@example.com`.

Instead of using this parameter, you can use the X-header `X-SES-SOURCE-ARN` in the raw message of the email. If you use both the `SourceArn` parameter and the corresponding X-header, Amazon SES uses the value of the `SourceArn` parameter.

#### Note

For information about when to use this parameter, see the description of `SendRawEmail` in this guide, or see the [Amazon SES Developer Guide](#).

Type: String

Required: No

## Response Elements

The following element is returned by the service.

### MessageId

The unique message identifier returned from the `SendRawEmail` action.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

### MailFromDomainNotVerified

Indicates that the message could not be sent because Amazon SES could not read the MX record required to use the specified MAIL FROM domain. For information about editing the custom MAIL FROM domain settings for an identity, see the [Amazon SES Developer Guide](#).

HTTP Status Code: 400

### MessageRejected

Indicates that the action failed, and the message could not be sent. Check the error stack for more information about what caused the error.

HTTP Status Code: 400

## Example

### Sample Request

```
POST / HTTP/1.1
Date: Wed, 17 Aug 2011 00:21:38 GMT
Host: email.us-east-1.amazonaws.com
Content-Type: application/x-www-form-urlencoded
```

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```
X-Amzn-Authorization: AWS3 AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE,  
Signature=uN0lHif14tmMBzwnkHzaWBLrBFvJAvyXCsfSYAvwLuc=,  
Algorithm=HmacSHA256, SignedHeaders=Date;Host  
Content-Length: 230  
  
AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE  
&Action=SendRawEmail  
&RawMessage.Data=U3ViamVjdDogRXhhbXBsZQpGcm9tOiBleGFtcGxlQGFTYXpvi5jb20KVG8  
6IGV4YWlwbGVAYWlh%0Aem9uLmNvbQpDb250ZW50LVR5cGU6IG1lbHRpcGFydC9hbHRlcm5hdG12  
ZTsgYm91bmRhcnk9MDAx%0ANmU2OGY5ZDkyOWNiMDk2MDRhYWE4MzA0MgoKLS0wMDE2ZTY4ZjlkO  
TI5Y2IwOTYwNGFhYTgzMDQy%0ACkNvbnRlbnQtVHlwZTogdGV4dC9wbGFpbjsgY2hhcnNldD1JU0  
8tODg1OS0xCgpCb2R5LgoKLS0w%0AMDE2ZTY4ZjlkOTI5Y2IwOTYwNGFhYTgzMDQyCkNvbnRlbnQ  
tVHlwZTogdGV4dC9odG1sOyBjaGFy%0Ac2V0PUL1TTY04ODU5LTEKCKJvZHkuPGJyPgoKLS0wMDE2  
ZTY4ZjlkOTI5Y2IwOTYwNGFhYTgzMDQy%0ALS0%3D%0A  
&FromArn=arn%3Aaws%3Aases%3Aus-east-1%3A999999999999%3Aidentity/example@amazon.com  
&Timestamp=2011-08-17T00%3A21%3A38.000Z
```

### Sample Response

```
<SendRawEmailResponse xmlns="http://ses.amazonaws.com/doc/2010-12-01/">  
  <SendRawEmailResult>  
    <MessageId>00000131d51d6b36-1d4f9293-0aee-4503-b573-9ae4e70e9e38-  
000000</MessageId>  
  </SendRawEmailResult>  
  <ResponseMetadata>  
    <RequestId>e0abcdfa-c866-11e0-b6d0-273d09173b49</RequestId>  
  </ResponseMetadata>  
</SendRawEmailResponse>
```

## SetActiveReceiptRuleSet

Sets the specified receipt rule set as the active receipt rule set.

### Note

To disable your email-receiving through Amazon SES completely, you can call this API with `RuleSetName` set to null.

For information about managing receipt rule sets, see the [Amazon SES Developer Guide](#).

This action is throttled at one request per second.

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

### RuleSetName

The name of the receipt rule set to make active. Setting this value to null disables all email receiving.

Type: String

Required: No

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

### RuleSetDoesNotExist

Indicates that the provided receipt rule set does not exist.

HTTP Status Code: 400

## SetIdentityDkimEnabled

Enables or disables Easy DKIM signing of email sent from an identity:

- If Easy DKIM signing is enabled for a domain name identity (e.g., `example.com`), then Amazon SES will DKIM-sign all email sent by addresses under that domain name (e.g., `user@example.com`).
- If Easy DKIM signing is enabled for an email address, then Amazon SES will DKIM-sign all email sent by that email address.

For email addresses (e.g., `user@example.com`), you can only enable Easy DKIM signing if the corresponding domain (e.g., `example.com`) has been set up for Easy DKIM using the AWS Console or the `VerifyDomainDkim` action.

This action is throttled at one request per second.

For more information about Easy DKIM signing, go to the [Amazon SES Developer Guide](#).

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

### DkimEnabled

Sets whether DKIM signing is enabled for an identity. Set to `true` to enable DKIM signing for this identity; `false` to disable it.

Type: Boolean

Required: Yes

### Identity

The identity for which DKIM signing should be enabled or disabled.

Type: String

Required: Yes

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

## Example

### Sample Request

```
POST / HTTP/1.1
Date: Fri, 29 Jun 2012 22:42:08 GMT
Host: email.us-east-1.amazonaws.com
Content-Type: application/x-www-form-urlencoded
X-Amzn-Authorization: AWS3 AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE,
  Signature=u/hDNhYm87AV7LAPzouTBz6HJxUEuE5k96sLzYHjR24=,
  Algorithm=HmacSHA256, SignedHeaders=Date;Host
Content-Length: 168

AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
&Action=SetIdentityDkimEnabled
&DkimEnabled=true&Identity=user%40example.com
&Timestamp=2012-06-29T22%3A42%3A08.000Z
&Version=2010-12-01
```

## Sample Response

```
<SetIdentityDkimEnabledResponse xmlns="http://ses.amazonaws.com/doc/2010-12-01/">
  <SetIdentityDkimEnabledResult/>
  <ResponseMetadata>
    <RequestId>7aa61362-c469-11e1-ae5-6bbb4608fbcc</RequestId>
  </ResponseMetadata>
</SetIdentityDkimEnabledResponse>
```

## SetIdentityFeedbackForwardingEnabled

Given an identity (an email address or a domain), enables or disables whether Amazon SES forwards bounce and complaint notifications as email. Feedback forwarding can only be disabled when Amazon Simple Notification Service (Amazon SNS) topics are specified for both bounces and complaints.

### Note

Feedback forwarding does not apply to delivery notifications. Delivery notifications are only available through Amazon SNS.

This action is throttled at one request per second.

For more information about using notifications with Amazon SES, see the [Amazon SES Developer Guide](#).

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

### ForwardingEnabled

Sets whether Amazon SES will forward bounce and complaint notifications as email. `true` specifies that Amazon SES will forward bounce and complaint notifications as email, in addition to any Amazon SNS topic publishing otherwise specified. `false` specifies that Amazon SES will publish bounce and complaint notifications only through Amazon SNS. This value can only be set to `false` when Amazon SNS topics are set for both `Bounce` and `Complaint` notification types.

Type: Boolean

Required: Yes

### Identity

The identity for which to set bounce and complaint notification forwarding. Examples: `user@example.com`, `example.com`.

Type: String

Required: Yes

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

## Example

### Sample Request

```
POST / HTTP/1.1
Date: Fri, 15 Jun 2012 20:31:21 GMT
Host: email.us-east-1.amazonaws.com
Content-Type: application/x-www-form-urlencoded
X-Amzn-Authorization: AWS3 AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE,
  Signature=juNpmD6UJaN+r7gcLa2ZNZpO3AmF1ZfOkD6PgXgNhRA=,
  Algorithm=HmacSHA256, SignedHeaders=Date;Host
Content-Length: 188

AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
&Action=SetIdentityFeedbackForwardingEnabled
&ForwardingEnabled=true
&Identity=user%40example.com
&Timestamp=2012-06-15T20%3A31%3A21.000Z
```

```
&Version=2010-12-01
```

## Sample Response

```
<SetIdentityFeedbackForwardingEnabledResponse xmlns="http://ses.amazonaws.com/doc/2010-12-01/">  
  <SetIdentityFeedbackForwardingEnabledResult/>  
  <ResponseMetadata>  
    <RequestId>299f4af4-b72a-11e1-901f-1fbd90e8104f</RequestId>  
  </ResponseMetadata>  
</SetIdentityFeedbackForwardingEnabledResponse>
```

## SetIdentityHeadersInNotificationsEnabled

Given an identity (an email address or a domain), sets whether Amazon SES includes the original email headers in the Amazon Simple Notification Service (Amazon SNS) notifications of a specified type.

This action is throttled at one request per second.

For more information about using notifications with Amazon SES, see the [Amazon SES Developer Guide](#).

### Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

#### Enabled

Sets whether Amazon SES includes the original email headers in Amazon SNS notifications of the specified notification type. A value of `true` specifies that Amazon SES will include headers in notifications, and a value of `false` specifies that Amazon SES will not include headers in notifications.

This value can only be set when `NotificationType` is already set to use a particular Amazon SNS topic.

Type: Boolean

Required: Yes

#### Identity

The identity for which to enable or disable headers in notifications. Examples: `user@example.com`, `example.com`.

Type: String

Required: Yes

#### NotificationType

The notification type for which to enable or disable headers in notifications.

Type: String

Valid Values: `Bounce` | `Complaint` | `Delivery`

Required: Yes

### Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

### Example

#### Sample Request

```
POST / HTTP/1.1
Date: Fri, 15 Jun 2012 20:31:21 GMT
Host: email.us-east-1.amazonaws.com
Content-Type: application/x-www-form-urlencoded
X-Amzn-Authorization: AWS3 AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE,
Signature=juNpmD6UJaN+r7gcLa2ZNZpO3AmF1ZfOkD6PgXgNhRA=,
Algorithm=HmacSHA256, SignedHeaders=Date;Host
Content-Length: 188

AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
&Action=SetIdentityHeadersInNotificationsEnabled
&Enabled=true
&Identity=user%40example.com
&NotificationType=Bounce
```



```
&Timestamp=2012-06-15T20%3A31%3A21.000Z  
&Version=2010-12-01
```

## Sample Response

```
<SetIdentityHeadersInNotificationsEnabledResponse xmlns="http://ses.amazon  
aws.com/doc/2010-12-01/">  
<SetIdentityHeadersInNotificationsEnabledResult/>  
<ResponseMetadata>  
<RequestId>299f4af4-b72a-11e1-901f-1fbd90e8104f</RequestId>  
</ResponseMetadata>  
</SetIdentityHeadersInNotificationsEnabledResponse>
```

# SetIdentityMailFromDomain

Enables or disables the custom MAIL FROM domain setup for a verified identity (an email address or a domain).

## Important

To send emails using the specified MAIL FROM domain, you must add an MX record to your MAIL FROM domain's DNS settings. If you want your emails to pass Sender Policy Framework (SPF) checks, you must also add or update an SPF record. For more information, see the [Amazon SES Developer Guide](#).

This action is throttled at one request per second.

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

### BehaviorOnMXFailure

The action that you want Amazon SES to take if it cannot successfully read the required MX record when you send an email. If you choose `UseDefaultValue`, Amazon SES will use `amazonses.com` (or a subdomain of that) as the MAIL FROM domain. If you choose `RejectMessage`, Amazon SES will return a `MailFromDomainNotVerified` error and not send the email.

The action specified in `BehaviorOnMXFailure` is taken when the custom MAIL FROM domain setup is in the `Pending`, `Failed`, and `TemporaryFailure` states.

Type: String

Valid Values: `UseDefaultValue` | `RejectMessage`

Required: No

### Identity

The verified identity for which you want to enable or disable the specified custom MAIL FROM domain.

Type: String

Required: Yes

### MailFromDomain

The custom MAIL FROM domain that you want the verified identity to use. The MAIL FROM domain must 1) be a subdomain of the verified identity, 2) not be used in a "From" address if the MAIL FROM domain is the destination of email feedback forwarding (for more information, see the [Amazon SES Developer Guide](#)), and 3) not be used to receive emails. A value of `null` disables the custom MAIL FROM setting for the identity.

Type: String

Required: No

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

## SetIdentityNotificationTopic

Given an identity (an email address or a domain), sets the Amazon Simple Notification Service (Amazon SNS) topic to which Amazon SES will publish bounce, complaint, and/or delivery notifications for emails sent with that identity as the `Source`.

### Note

Unless feedback forwarding is enabled, you must specify Amazon SNS topics for bounce and complaint notifications. For more information, see `SetIdentityFeedbackForwardingEnabled`.

This action is throttled at one request per second.

For more information about feedback notification, see the [Amazon SES Developer Guide](#).

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

### Identity

The identity for which the Amazon SNS topic will be set. You can specify an identity by using its name or by using its Amazon Resource Name (ARN). Examples: `user@example.com`, `example.com`, `arn:aws:ses:us-east-1:123456789012:identity/example.com`.

Type: String

Required: Yes

### NotificationType

The type of notifications that will be published to the specified Amazon SNS topic.

Type: String

Valid Values: `Bounce` | `Complaint` | `Delivery`

Required: Yes

### SnsTopic

The Amazon Resource Name (ARN) of the Amazon SNS topic. If the parameter is omitted from the request or a null value is passed, `SnsTopic` is cleared and publishing is disabled.

Type: String

Required: No

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

## Example

### Sample Request

```
POST / HTTP/1.1
Date: Sat, 12 May 2012 05:27:54 GMT
Host: email.us-east-1.amazonaws.com
Content-Type: application/x-www-form-urlencoded
X-Amzn-Authorization: AWS3 AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE,
  Signature=3+KQ4VHx991T7Kb41HmFcZJxuHz4/6mf2H5Fxy+tuLc=,
  Algorithm=HmacSHA256, SignedHeaders=Date;Host
Content-Length: 203

AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
```

```
&Action=SetIdentityNotificationTopic
&Identity=user@example.com
&SnsTopic=arn%3Aaws%3Asns%3Aus-east-1%3A123456789012%3Aexample
&NotificationType=Bounce
&Timestamp=2012-05-12T05%3A27%3A54.000Z&Version=2010-12-01
```

## Sample Response

```
<SetIdentityNotificationTopicResponse xmlns="http://ses.amazonaws.com/doc/2010-12-01/">
  <SetIdentityNotificationTopicResult/>
  <ResponseMetadata>
    <RequestId>299f4af4-b72a-11e1-901f-1fbd90e8104f</RequestId>
  </ResponseMetadata>
</SetIdentityNotificationTopicResponse>
```

# SetReceiptRulePosition

Sets the position of the specified receipt rule in the receipt rule set.

For information about managing receipt rules, see the [Amazon SES Developer Guide](#).

This action is throttled at one request per second.

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

### After

The name of the receipt rule after which to place the specified receipt rule.

Type: String

Required: No

### RuleName

The name of the receipt rule to reposition.

Type: String

Required: Yes

### RuleSetName

The name of the receipt rule set that contains the receipt rule to reposition.

Type: String

Required: Yes

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

### RuleDoesNotExist

Indicates that the provided receipt rule does not exist.

HTTP Status Code: 400

### RuleSetDoesNotExist

Indicates that the provided receipt rule set does not exist.

HTTP Status Code: 400

## UpdateReceiptRule

Updates a receipt rule.

For information about managing receipt rules, see the [Amazon SES Developer Guide](#).

This action is throttled at one request per second.

### Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

#### Rule

A data structure that contains the updated receipt rule information.

Type: [ReceiptRule \(p. 93\)](#) object

Required: Yes

#### RuleSetName

The name of the receipt rule set to which the receipt rule belongs.

Type: String

Required: Yes

### Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

#### InvalidLambdaFunction

Indicates that the provided AWS Lambda function is invalid, or that Amazon SES could not execute the provided function, possibly due to permissions issues. For information about giving permissions, see the [Amazon SES Developer Guide](#).

HTTP Status Code: 400

#### InvalidS3Configuration

Indicates that the provided Amazon S3 bucket or AWS KMS encryption key is invalid, or that Amazon SES could not publish to the bucket, possibly due to permissions issues. For information about giving permissions, see the [Amazon SES Developer Guide](#).

HTTP Status Code: 400

#### InvalidSnsTopic

Indicates that the provided Amazon SNS topic is invalid, or that Amazon SES could not publish to the topic, possibly due to permissions issues. For information about giving permissions, see the [Amazon SES Developer Guide](#).

HTTP Status Code: 400

#### LimitExceeded

Indicates that a resource could not be created due to service limits. For a list of Amazon SES limits, see the [Amazon SES Developer Guide](#).

HTTP Status Code: 400

#### RuleDoesNotExist

Indicates that the provided receipt rule does not exist.

HTTP Status Code: 400

#### RuleSetDoesNotExist

Indicates that the provided receipt rule set does not exist.

HTTP Status Code: 400

## VerifyDomainDkim

Returns a set of DKIM tokens for a domain. DKIM *tokens* are character strings that represent your domain's identity. Using these tokens, you will need to create DNS CNAME records that point to DKIM public keys hosted by Amazon SES. Amazon Web Services will eventually detect that you have updated your DNS records; this detection process may take up to 72 hours. Upon successful detection, Amazon SES will be able to DKIM-sign email originating from that domain.

This action is throttled at one request per second.

To enable or disable Easy DKIM signing for a domain, use the `SetIdentityDkimEnabled` action.

For more information about creating DNS records using DKIM tokens, go to the [Amazon SES Developer Guide](#).

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

### Domain

The name of the domain to be verified for Easy DKIM signing.

Type: String

Required: Yes

## Response Elements

The following element is returned by the service.

### DkimTokens.member.N

A set of character strings that represent the domain's identity. If the identity is an email address, the tokens represent the domain of that address.

Using these tokens, you will need to create DNS CNAME records that point to DKIM public keys hosted by Amazon SES. Amazon Web Services will eventually detect that you have updated your DNS records; this detection process may take up to 72 hours. Upon successful detection, Amazon SES will be able to DKIM-sign emails originating from that domain.

For more information about creating DNS records using DKIM tokens, go to the [Amazon SES Developer Guide](#).

Type: array of Strings

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

## Example

### Sample Request

```
POST / HTTP/1.1
Date: Fri, 29 Jun 2012 22:43:30 GMT
Host: email.us-east-1.amazonaws.com
Content-Type: application/x-www-form-urlencoded
X-Amzn-Authorization: AWS3 AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE,
  Signature=roXhd+JhEjeBBo5tSERhrptRHSw4XHHz6Ra4BXYHIduk=,
  Algorithm=HmacSHA256, SignedHeaders=Date;Host
```

```
Content-Length: 136
```

```
AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE  
&Action=VerifyDomainDkim  
&Domain=example.com  
&Timestamp=2012-06-29T22%3A43%3A30.000Z  
&Version=2010-12-01
```

## Sample Response

```
<VerifyDomainDkimResponse xmlns="http://ses.amazonaws.com/doc/2010-12-01/">  
  <VerifyDomainDkimResult>  
    <DkimTokens>  
      <member>vvjuipp74whm76ggoni7qmwwn4w4qusjiainivf6sf</member>  
      <member>3frqe7jn4obpuxjpwpolz6ipb3k5nvt2nhjpik2oy</member>  
      <member>wrqplteh7oodxnad7hsl4mixg2uavzneazxv5sxi2</member>  
    </DkimTokens>  
  </VerifyDomainDkimResult>  
  <ResponseMetadata>  
    <RequestId>9662c15b-c469-11e1-99d1-797d6ecd6414</RequestId>  
  </ResponseMetadata>  
</VerifyDomainDkimResponse>
```



# VerifyDomainIdentity

Verifies a domain.

This action is throttled at one request per second.

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

### Domain

The domain to be verified.

Type: String

Required: Yes

## Response Elements

The following element is returned by the service.

### VerificationToken

A TXT record that must be placed in the DNS settings for the domain, in order to complete domain verification.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

## Example

### Sample Request

```
POST / HTTP/1.1
Date: Sat, 12 May 2012 05:24:02 GMT
Host: email.us-east-1.amazonaws.com
Content-Type: application/x-www-form-urlencoded
X-Amzn-Authorization: AWS3 AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE,
  Signature=Wrl+6RCfV+QgjLki2dtIrlecMK9+RrsDatG5uWneDAu8=,
  Algorithm=HmacSHA256, SignedHeaders=Date;Host
Content-Length: 139

AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
&Action=VerifyDomainIdentity
&Domain=domain.com
&Timestamp=2012-05-12T05%3A24%3A02.000Z
&Version=2010-12-01
```

## Sample Response

```
<VerifyDomainIdentityResponse xmlns="http://ses.amazonaws.com/doc/2010-12-01/">
  <VerifyDomainIdentityResult>
    <VerificationToken>QTKknzFg2J4ygwa+XvHAXUllhyHoY0gVfZdfjIedHZ0=</Verifica
tionToken>
  </VerifyDomainIdentityResult>
  <ResponseMetadata>
    <RequestId>94f6368e-9bf2-11e1-8ee7-c98a0037a2b6</RequestId>
  </ResponseMetadata>
</VerifyDomainIdentityResponse>
```

## VerifyEmailAddress

Verifies an email address. This action causes a confirmation email message to be sent to the specified address.

### Important

The VerifyEmailAddress action is deprecated as of the May 15, 2012 release of Domain Verification. The VerifyEmailIdentity action is now preferred.

This action is throttled at one request per second.

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

### EmailAddress

The email address to be verified.

Type: String

Required: Yes

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

## Example

### Sample Request

```
POST / HTTP/1.1
Date: Thu, 18 Aug 2011 22:28:27 GMT
Host: email.us-east-1.amazonaws.com
Content-Type: application/x-www-form-urlencoded
X-Amzn-Authorization: AWS3 AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE,
  Signature=o9NK68jraFg5BnaTQiQhpxj2x1dGONOEfHHgsM6o5as=,
  Algorithm=HmacSHA256, SignedHeaders=Date;Host
Content-Length: 132

AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
&Action=VerifyEmailAddress
&EmailAddress=user%40example.com
&Timestamp=2011-08-18T22%3A28%3A27.000Z
```

### Sample Response

```
<VerifyEmailAddressResponse xmlns="http://ses.amazonaws.com/doc/2010-12-01/">
  <ResponseMetadata>
    <RequestId>8edd7eb2-c864-11e0-9f8f-3da8fc215a7e</RequestId>
  </ResponseMetadata>
</VerifyEmailAddressResponse>
```

**Amazon Simple Email Service API Reference**  
**Example**

---



## VerifyEmailIdentity

Verifies an email address. This action causes a confirmation email message to be sent to the specified address.

This action is throttled at one request per second.

### Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 102\)](#).

#### EmailAddress

The email address to be verified.

Type: String

Required: Yes

### Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 104\)](#).

### Example

#### Sample Request

```
POST / HTTP/1.1
Date: Sat, 12 May 2012 05:21:58 GMT
Host: email.us-east-1.amazonaws.com
Content-Type: application/x-www-form-urlencoded
X-Amzn-Authorization: AWS3 AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE,
  Signature=hQJj2pxypqJHQgU/BW1EZGUiNIYGhkQDf7tI6UgQ2qw=,
  Algorithm=HmacSHA256, SignedHeaders=Date;Host
Content-Length: 151

AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
&Action=VerifyEmailIdentity
&EmailAddress=user%40domain.com
&Timestamp=2012-05-12T05%3A21%3A58.000Z
&Version=2010-12-01
```

#### Sample Response

```
<VerifyEmailIdentityResponse xmlns="http://ses.amazonaws.com/doc/2010-12-01/">
  <VerifyEmailIdentityResult/>
  <ResponseMetadata>
    <RequestId>47e0ef1a-9bf2-11e1-9279-0100e8cf109a</RequestId>
  </ResponseMetadata>
</VerifyEmailIdentityResponse>
```

**Amazon Simple Email Service API Reference**  
**Example**

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# Data Types

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The Amazon Simple Email 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:

- [AddHeaderAction](#) (p. 75)
- [Body](#) (p. 76)
- [BounceAction](#) (p. 77)
- [BouncedRecipientInfo](#) (p. 78)
- [Content](#) (p. 79)
- [Destination](#) (p. 80)
- [ExtensionField](#) (p. 81)
- [IdentityDkimAttributes](#) (p. 82)
- [IdentityMailFromDomainAttributes](#) (p. 83)
- [IdentityNotificationAttributes](#) (p. 84)
- [IdentityVerificationAttributes](#) (p. 85)
- [LambdaAction](#) (p. 86)
- [Message](#) (p. 87)
- [MessageDsn](#) (p. 88)
- [RawMessage](#) (p. 89)
- [ReceiptAction](#) (p. 90)
- [ReceiptFilter](#) (p. 91)
- [ReceiptIpFilter](#) (p. 92)
- [ReceiptRule](#) (p. 93)
- [ReceiptRuleSetMetadata](#) (p. 94)
- [RecipientDsnFields](#) (p. 95)

- [S3Action](#) (p. 96)
- [SendDataPoint](#) (p. 98)
- [SNSAction](#) (p. 99)
- [StopAction](#) (p. 100)
- [WorkmailAction](#) (p. 101)



# AddHeaderAction

When included in a receipt rule, this action adds a header to the received email.

For information about adding a header using a receipt rule, see the [Amazon SES Developer Guide](#).

## Contents

### HeaderName

The name of the header to add. Must be between 1 and 50 characters, inclusive, and consist of alphanumeric (a-z, A-Z, 0-9) characters and dashes only.

Type: String

Required: Yes

### HeaderValue

Must be less than 2048 characters, and must not contain newline characters ("`\r`" or "`\n`").

Type: String

Required: Yes

## Body

Represents the body of the message. You can specify text, HTML, or both. If you use both, then the message should display correctly in the widest variety of email clients.

## Contents

### Html

The content of the message, in HTML format. Use this for email clients that can process HTML. You can include clickable links, formatted text, and much more in an HTML message.

Type: [Content \(p. 79\)](#) object

Required: No

### Text

The content of the message, in text format. Use this for text-based email clients, or clients on high-latency networks (such as mobile devices).

Type: [Content \(p. 79\)](#) object

Required: No

## BounceAction

When included in a receipt rule, this action rejects the received email by returning a bounce response to the sender and, optionally, publishes a notification to Amazon Simple Notification Service (Amazon SNS). For information about sending a bounce message in response to a received email, see the [Amazon SES Developer Guide](#).

### Contents

#### Message

Human-readable text to include in the bounce message.

Type: String

Required: Yes

#### Sender

The email address of the sender of the bounced email. This is the address from which the bounce message will be sent.

Type: String

Required: Yes

#### SmtReplyCode

The SMTP reply code, as defined by [RFC 5321](#).

Type: String

Required: Yes

#### StatusCode

The SMTP enhanced status code, as defined by [RFC 3463](#).

Type: String

Required: No

#### TopicArn

The Amazon Resource Name (ARN) of the Amazon SNS topic to notify when the bounce action is taken. An example of an Amazon SNS topic ARN is

`arn:aws:sns:us-west-2:123456789012:MyTopic`. For more information about Amazon SNS topics, see the [Amazon SNS Developer Guide](#).

Type: String

Required: No

## BouncedRecipientInfo

Recipient-related information to include in the Delivery Status Notification (DSN) when an email that Amazon SES receives on your behalf bounces.

For information about receiving email through Amazon SES, see the [Amazon SES Developer Guide](#).

### Contents

#### **BounceType**

The reason for the bounce. You must provide either this parameter or `RecipientDsnFields`.

Type: String

Valid Values: `DoesNotExist` | `MessageTooLarge` | `ExceededQuota` | `ContentRejected`  
| `Undefined` | `TemporaryFailure`

Required: No

#### **Recipient**

The email address of the recipient of the bounced email.

Type: String

Required: Yes

#### **RecipientArn**

This parameter is used only for sending authorization. It is the ARN of the identity that is associated with the sending authorization policy that permits you to receive email for the recipient of the bounced email. For more information about sending authorization, see the [Amazon SES Developer Guide](#).

Type: String

Required: No

#### **RecipientDsnFields**

Recipient-related DSN fields, most of which would normally be filled in automatically when provided with a `BounceType`. You must provide either this parameter or `BounceType`.

Type: [RecipientDsnFields \(p. 95\)](#) object

Required: No

## Content

Represents textual data, plus an optional character set specification.

By default, the text must be 7-bit ASCII, due to the constraints of the SMTP protocol. If the text must contain any other characters, then you must also specify a character set. Examples include UTF-8, ISO-8859-1, and Shift\_JIS.

## Contents

### Charset

The character set of the content.

Type: String

Required: No

### Data

The textual data of the content.

Type: String

Required: Yes

## Destination

Represents the destination of the message, consisting of To:, CC:, and BCC: fields.

By default, the string must be 7-bit ASCII. If the text must contain any other characters, then you must use MIME encoded-word syntax (RFC 2047) instead of a literal string. MIME encoded-word syntax uses the following form: `=?charset?encoding?encoded-text?='`. For more information, see [RFC 2047](#).

## Contents

### **BccAddresses.member.N**

The BCC: field(s) of the message.

Type: array of Strings

Required: No

### **CcAddresses.member.N**

The CC: field(s) of the message.

Type: array of Strings

Required: No

### **ToAddresses.member.N**

The To: field(s) of the message.

Type: array of Strings

Required: No

## ExtensionField

Additional X-headers to include in the Delivery Status Notification (DSN) when an email that Amazon SES receives on your behalf bounces.

For information about receiving email through Amazon SES, see the [Amazon SES Developer Guide](#).

### Contents

#### Name

The name of the header to add. Must be between 1 and 50 characters, inclusive, and consist of alphanumeric (a-z, A-Z, 0-9) characters and dashes only.

Type: String

Required: Yes

#### Value

The value of the header to add. Must be less than 2048 characters, and must not contain newline characters ("\r" or "\n").

Type: String

Required: Yes

# IdentityDkimAttributes

Represents the DKIM attributes of a verified email address or a domain.

## Contents

### **DkimEnabled**

True if DKIM signing is enabled for email sent from the identity; false otherwise.

Type: Boolean

Required: Yes

### **DkimTokens.member.N**

A set of character strings that represent the domain's identity. Using these tokens, you will need to create DNS CNAME records that point to DKIM public keys hosted by Amazon SES. Amazon Web Services will eventually detect that you have updated your DNS records; this detection process may take up to 72 hours. Upon successful detection, Amazon SES will be able to DKIM-sign email originating from that domain. (This only applies to domain identities, not email address identities.)

For more information about creating DNS records using DKIM tokens, go to the [Amazon SES Developer Guide](#).

Type: array of Strings

Required: No

### **DkimVerificationStatus**

Describes whether Amazon SES has successfully verified the DKIM DNS records (tokens) published in the domain name's DNS. (This only applies to domain identities, not email address identities.)

Type: String

Valid Values: Pending | Success | Failed | TemporaryFailure | NotStarted

Required: Yes



# IdentityMailFromDomainAttributes

Represents the custom MAIL FROM domain attributes of a verified identity (email address or domain).

## Contents

### BehaviorOnMXFailure

The action that Amazon SES takes if it cannot successfully read the required MX record when you send an email. A value of `UseDefaultValue` indicates that if Amazon SES cannot read the required MX record, it uses `amazonses.com` (or a subdomain of that) as the MAIL FROM domain. A value of `RejectMessage` indicates that if Amazon SES cannot read the required MX record, Amazon SES returns a `MailFromDomainNotVerified` error and does not send the email.

The custom MAIL FROM setup states that result in this behavior are `Pending`, `Failed`, and `TemporaryFailure`.

Type: String

Valid Values: `UseDefaultValue` | `RejectMessage`

Required: Yes

### MailFromDomain

The custom MAIL FROM domain that the identity is configured to use.

Type: String

Required: Yes

### MailFromDomainStatus

The state that indicates whether Amazon SES has successfully read the MX record required for custom MAIL FROM domain setup. If the state is `Success`, Amazon SES uses the specified custom MAIL FROM domain when the verified identity sends an email. All other states indicate that Amazon SES takes the action described by `BehaviorOnMXFailure`.

Type: String

Valid Values: `Pending` | `Success` | `Failed` | `TemporaryFailure`

Required: Yes

## IdentityNotificationAttributes

Represents the notification attributes of an identity, including whether an identity has Amazon Simple Notification Service (Amazon SNS) topics set for bounce, complaint, and/or delivery notifications, and whether feedback forwarding is enabled for bounce and complaint notifications.

### Contents

#### **BounceTopic**

The Amazon Resource Name (ARN) of the Amazon SNS topic where Amazon SES will publish bounce notifications.

Type: String

Required: Yes

#### **ComplaintTopic**

The Amazon Resource Name (ARN) of the Amazon SNS topic where Amazon SES will publish complaint notifications.

Type: String

Required: Yes

#### **DeliveryTopic**

The Amazon Resource Name (ARN) of the Amazon SNS topic where Amazon SES will publish delivery notifications.

Type: String

Required: Yes

#### **ForwardingEnabled**

Describes whether Amazon SES will forward bounce and complaint notifications as email. `true` indicates that Amazon SES will forward bounce and complaint notifications as email, while `false` indicates that bounce and complaint notifications will be published only to the specified bounce and complaint Amazon SNS topics.

Type: Boolean

Required: Yes

#### **HeadersInBounceNotificationsEnabled**

Describes whether Amazon SES includes the original email headers in Amazon SNS notifications of type `Bounce`. A value of `true` specifies that Amazon SES will include headers in bounce notifications, and a value of `false` specifies that Amazon SES will not include headers in bounce notifications.

Type: Boolean

Required: No

#### **HeadersInComplaintNotificationsEnabled**

Describes whether Amazon SES includes the original email headers in Amazon SNS notifications of type `Complaint`. A value of `true` specifies that Amazon SES will include headers in complaint notifications, and a value of `false` specifies that Amazon SES will not include headers in complaint notifications.

Type: Boolean

Required: No

#### **HeadersInDeliveryNotificationsEnabled**

Describes whether Amazon SES includes the original email headers in Amazon SNS notifications of type `Delivery`. A value of `true` specifies that Amazon SES will include headers in delivery notifications, and a value of `false` specifies that Amazon SES will not include headers in delivery notifications.

Type: Boolean

Required: No

# IdentityVerificationAttributes

Represents the verification attributes of a single identity.

## Contents

### VerificationStatus

The verification status of the identity: "Pending", "Success", "Failed", or "TemporaryFailure".

Type: String

Valid Values: Pending | Success | Failed | TemporaryFailure | NotStarted

Required: Yes

### VerificationToken

The verification token for a domain identity. Null for email address identities.

Type: String

Required: No

## LambdaAction

When included in a receipt rule, this action calls an AWS Lambda function and, optionally, publishes a notification to Amazon Simple Notification Service (Amazon SNS).

To enable Amazon SES to call your AWS Lambda function or to publish to an Amazon SNS topic of another account, Amazon SES must have permission to access those resources. For information about giving permissions, see the [Amazon SES Developer Guide](#).

For information about using AWS Lambda actions in receipt rules, see the [Amazon SES Developer Guide](#).

## Contents

### FunctionArn

The Amazon Resource Name (ARN) of the AWS Lambda function. An example of an AWS Lambda function ARN is `arn:aws:lambda:us-west-2:account-id:function:MyFunction`. For more information about AWS Lambda, see the [AWS Lambda Developer Guide](#).

Type: String

Required: Yes

### InvocationType

The invocation type of the AWS Lambda function. An invocation type of `RequestResponse` means that the execution of the function will immediately result in a response, and a value of `Event` means that the function will be invoked asynchronously. The default value is `Event`. For information about AWS Lambda invocation types, see the [AWS Lambda Developer Guide](#).

#### Important

There is a 30-second timeout on `RequestResponse` invocations. You should use `Event` invocation in most cases. Use `RequestResponse` only when you want to make a mail flow decision, such as whether to stop the receipt rule or the receipt rule set.

Type: String

Valid Values: `Event` | `RequestResponse`

Required: No

### TopicArn

The Amazon Resource Name (ARN) of the Amazon SNS topic to notify when the Lambda action is taken. An example of an Amazon SNS topic ARN is `arn:aws:sns:us-west-2:123456789012:MyTopic`. For more information about Amazon SNS topics, see the [Amazon SNS Developer Guide](#).

Type: String

Required: No

# Message

Represents the message to be sent, composed of a subject and a body.

## Contents

### Body

The message body.

Type: [Body \(p. 76\)](#) object

Required: Yes

### Subject

The subject of the message: A short summary of the content, which will appear in the recipient's inbox.

Type: [Content \(p. 79\)](#) object

Required: Yes

## MessageDsn

Message-related information to include in the Delivery Status Notification (DSN) when an email that Amazon SES receives on your behalf bounces.

For information about receiving email through Amazon SES, see the [Amazon SES Developer Guide](#).

### Contents

#### **ArrivalDate**

When the message was received by the reporting mail transfer agent (MTA), in [RFC 822](#) date-time format.

Type: Timestamp

Required: No

#### **ExtensionFields.member.N**

Additional X-headers to include in the DSN.

Type: array of [ExtensionField \(p. 81\)](#) objects

Required: No

#### **ReportingMta**

The reporting MTA that attempted to deliver the message, formatted as specified in [RFC 3464](#) (`mta-name-type; mta-name`). The default value is `dns; inbound-smtp.[region].amazonaws.com`.

Type: String

Required: Yes

# RawMessage

Represents the raw data of the message.

## Contents

### Data

The raw data of the message. The client must ensure that the message format complies with Internet email standards regarding email header fields, MIME types, MIME encoding, and base64 encoding. The To:, CC:, and BCC: headers in the raw message can contain a group list.

If you are using `SendRawEmail` with sending authorization, you can include X-headers in the raw message to specify the "Source," "From," and "Return-Path" addresses. For more information, see the documentation for `SendRawEmail`.

#### **Important**

Do not include these X-headers in the DKIM signature, because they are removed by Amazon SES before sending the email.

For more information, go to the [Amazon SES Developer Guide](#).

Type: Base64-encoded binary data

Required: Yes

# ReceiptAction

An action that Amazon SES can take when it receives an email on behalf of one or more email addresses or domains that you own. An instance of this data type can represent only one action.

For information about setting up receipt rules, see the [Amazon SES Developer Guide](#).

## Contents

### AddHeaderAction

Adds a header to the received email.

Type: [AddHeaderAction \(p. 75\)](#) object

Required: No

### BounceAction

Rejects the received email by returning a bounce response to the sender and, optionally, publishes a notification to Amazon Simple Notification Service (Amazon SNS).

Type: [BounceAction \(p. 77\)](#) object

Required: No

### LambdaAction

Calls an AWS Lambda function, and optionally, publishes a notification to Amazon SNS.

Type: [LambdaAction \(p. 86\)](#) object

Required: No

### S3Action

Saves the received message to an Amazon Simple Storage Service (Amazon S3) bucket and, optionally, publishes a notification to Amazon SNS.

Type: [S3Action \(p. 96\)](#) object

Required: No

### SNSAction

Publishes the email content within a notification to Amazon SNS.

Type: [SNSAction \(p. 99\)](#) object

Required: No

### StopAction

Terminates the evaluation of the receipt rule set and optionally publishes a notification to Amazon SNS.

Type: [StopAction \(p. 100\)](#) object

Required: No

### WorkmailAction

Calls Amazon WorkMail and, optionally, publishes a notification to Amazon SNS.

Type: [WorkmailAction \(p. 101\)](#) object

Required: No



# ReceiptFilter

A receipt IP address filter enables you to specify whether to accept or reject mail originating from an IP address or range of IP addresses.

For information about setting up IP address filters, see the [Amazon SES Developer Guide](#).

## Contents

### IpFilter

A structure that provides the IP addresses to block or allow, and whether to block or allow incoming mail from them.

Type: [ReceiptIpFilter \(p. 92\)](#) object

Required: Yes

### Name

The name of the IP address filter. The name must:

- Contain only ASCII letters (a-z, A-Z), numbers (0-9), periods (.), underscores (\_), or dashes (-).
- Start and end with a letter or number.
- Contain less than 64 characters.

Type: String

Required: Yes

## ReceiptIpFilter

A receipt IP address filter enables you to specify whether to accept or reject mail originating from an IP address or range of IP addresses.

For information about setting up IP address filters, see the [Amazon SES Developer Guide](#).

### Contents

#### Cidr

A single IP address or a range of IP addresses that you want to block or allow, specified in Classless Inter-Domain Routing (CIDR) notation. An example of a single email address is 10.0.0.1. An example of a range of IP addresses is 10.0.0.1/24. For more information about CIDR notation, see [RFC 2317](#).

Type: String

Required: Yes

#### Policy

Indicates whether to block or allow incoming mail from the specified IP addresses.

Type: String

Valid Values: `Block` | `Allow`

Required: Yes

## ReceiptRule

Receipt rules enable you to specify which actions Amazon SES should take when it receives mail on behalf of one or more email addresses or domains that you own.

Each receipt rule defines a set of email addresses or domains to which it applies. If the email addresses or domains match at least one recipient address of the message, Amazon SES executes all of the receipt rule's actions on the message.

For information about setting up receipt rules, see the [Amazon SES Developer Guide](#).

## Contents

### Actions.member.N

An ordered list of actions to perform on messages that match at least one of the recipient email addresses or domains specified in the receipt rule.

Type: array of [ReceiptAction](#) (p. 90) objects

Required: No

### Enabled

If `true`, the receipt rule is active. The default value is `false`.

Type: Boolean

Required: No

### Name

The name of the receipt rule. The name must:

- Contain only ASCII letters (a-z, A-Z), numbers (0-9), periods (.), underscores (\_), or dashes (-).
- Start and end with a letter or number.
- Contain less than 64 characters.

Type: String

Required: Yes

### Recipients.member.N

The recipient domains and email addresses to which the receipt rule applies. If this field is not specified, this rule will match all recipients under all verified domains.

Type: array of Strings

Required: No

### ScanEnabled

If `true`, then messages to which this receipt rule applies are scanned for spam and viruses. The default value is `false`.

Type: Boolean

Required: No

### TlsPolicy

Specifies whether Amazon SES should require that incoming email is delivered over a connection encrypted with Transport Layer Security (TLS). If this parameter is set to `Require`, Amazon SES will bounce emails that are not received over TLS. The default is `Optional`.

Type: String

Valid Values: `Require` | `Optional`

Required: No

# ReceiptRuleSetMetadata

Information about a receipt rule set.

A receipt rule set is a collection of rules that specify what Amazon SES should do with mail it receives on behalf of your account's verified domains.

For information about setting up receipt rule sets, see the [Amazon SES Developer Guide](#).

## Contents

### **CreatedTimestamp**

The date and time the receipt rule set was created.

Type: Timestamp

Required: No

### **Name**

The name of the receipt rule set. The name must:

- Contain only ASCII letters (a-z, A-Z), numbers (0-9), periods (.), underscores (\_), or dashes (-).
- Start and end with a letter or number.
- Contain less than 64 characters.

Type: String

Required: No

# RecipientDsnFields

Recipient-related information to include in the Delivery Status Notification (DSN) when an email that Amazon SES receives on your behalf bounces.

For information about receiving email through Amazon SES, see the [Amazon SES Developer Guide](#).

## Contents

### Action

The action performed by the reporting mail transfer agent (MTA) as a result of its attempt to deliver the message to the recipient address. This is required by [RFC 3464](#).

Type: String

Valid Values: `failed` | `delayed` | `delivered` | `relayed` | `expanded`

Required: Yes

### DiagnosticCode

An extended explanation of what went wrong; this is usually an SMTP response. See [RFC 3463](#) for the correct formatting of this parameter.

Type: String

Required: No

### ExtensionFields.member.N

Additional X-headers to include in the DSN.

Type: array of [ExtensionField \(p. 81\)](#) objects

Required: No

### FinalRecipient

The email address to which the message was ultimately delivered. This corresponds to the `Final-Recipient` in the DSN. If not specified, `FinalRecipient` will be set to the `Recipient` specified in the `BouncedRecipientInfo` structure. Either `FinalRecipient` or the recipient in `BouncedRecipientInfo` must be a recipient of the original bounced message.

#### Note

Do not prepend the `FinalRecipient` email address with `rfc 822;`, as described in [RFC 3798](#).

Type: String

Required: No

### LastAttemptDate

The time the final delivery attempt was made, in [RFC 822](#) date-time format.

Type: Timestamp

Required: No

### RemoteMta

The MTA to which the remote MTA attempted to deliver the message, formatted as specified in [RFC 3464](#) (`mta-name-type; mta-name`). This parameter typically applies only to propagating synchronous bounces.

Type: String

Required: No

### Status

The status code that indicates what went wrong. This is required by [RFC 3464](#).

Type: String

Required: Yes

## S3Action

When included in a receipt rule, this action saves the received message to an Amazon Simple Storage Service (Amazon S3) bucket and, optionally, publishes a notification to Amazon Simple Notification Service (Amazon SNS).

To enable Amazon SES to write emails to your Amazon S3 bucket, use an AWS KMS key to encrypt your emails, or publish to an Amazon SNS topic of another account, Amazon SES must have permission to access those resources. For information about giving permissions, see the [Amazon SES Developer Guide](#).

### Note

When you save your emails to an Amazon S3 bucket, the maximum email size (including headers) is 30 MB. Emails larger than that will bounce.

For information about specifying Amazon S3 actions in receipt rules, see the [Amazon SES Developer Guide](#).

## Contents

### BucketName

The name of the Amazon S3 bucket to which to save the received email.

Type: String

Required: Yes

### KmsKeyArn

The customer master key that Amazon SES should use to encrypt your emails before saving them to the Amazon S3 bucket. You can use the default master key or a custom master key you created in AWS KMS as follows:

- To use the default master key, provide an ARN in the form of `arn:aws:kms:REGION:ACCOUNT-ID-WITHOUT-HYPHENS:alias/aws/ses`. For example, if your AWS account ID is 123456789012 and you want to use the default master key in the US West (Oregon) region, the ARN of the default master key would be `arn:aws:kms:us-west-2:123456789012:alias/aws/ses`. If you use the default master key, you don't need to perform any extra steps to give Amazon SES permission to use the key.
- To use a custom master key you created in AWS KMS, provide the ARN of the master key and ensure that you add a statement to your key's policy to give Amazon SES permission to use it. For more information about giving permissions, see the [Amazon SES Developer Guide](#).

For more information about key policies, see the [AWS KMS Developer Guide](#). If you do not specify a master key, Amazon SES will not encrypt your emails.

### Important

Your mail is encrypted by Amazon SES using the Amazon S3 encryption client before the mail is submitted to Amazon S3 for storage. It is not encrypted using Amazon S3 server-side encryption. This means that you must use the Amazon S3 encryption client to decrypt the email after retrieving it from Amazon S3, as the service has no access to use your AWS KMS keys for decryption. This encryption client is currently available with the [AWS Java SDK](#) and [AWS Ruby SDK](#) only. For more information about client-side encryption using AWS KMS master keys, see the [Amazon S3 Developer Guide](#).

Type: String

Required: No

### ObjectKeyPrefix

The key prefix of the Amazon S3 bucket. The key prefix is similar to a directory name that enables you to store similar data under the same directory in a bucket.

Type: String

Required: No

**TopicArn**

The ARN of the Amazon SNS topic to notify when the message is saved to the Amazon S3 bucket. An example of an Amazon SNS topic ARN is `arn:aws:sns:us-west-2:123456789012:MyTopic`. For more information about Amazon SNS topics, see the [Amazon SNS Developer Guide](#).

Type: String

Required: No

# SendDataPoint

Represents sending statistics data. Each `SendDataPoint` contains statistics for a 15-minute period of sending activity.

## Contents

### **Bounces**

Number of emails that have bounced.

Type: Long

Required: No

### **Complaints**

Number of unwanted emails that were rejected by recipients.

Type: Long

Required: No

### **DeliveryAttempts**

Number of emails that have been enqueued for sending.

Type: Long

Required: No

### **Rejects**

Number of emails rejected by Amazon SES.

Type: Long

Required: No

### **Timestamp**

Time of the data point.

Type: Timestamp

Required: No



## SNSAction

When included in a receipt rule, this action publishes a notification to Amazon Simple Notification Service (Amazon SNS). This action includes a complete copy of the email content in the Amazon SNS notifications. Amazon SNS notifications for all other actions simply provide information about the email. They do not include the email content itself.

If you own the Amazon SNS topic, you don't need to do anything to give Amazon SES permission to publish emails to it. However, if you don't own the Amazon SNS topic, you need to attach a policy to the topic to give Amazon SES permissions to access it. For information about giving permissions, see the [Amazon SES Developer Guide](#).

### Important

You can only publish emails that are 150 KB or less (including the header) to Amazon SNS. Larger emails will bounce. If you anticipate emails larger than 150 KB, use the S3 action instead.

For information about using a receipt rule to publish an Amazon SNS notification, see the [Amazon SES Developer Guide](#).

## Contents

### Encoding

The encoding to use for the email within the Amazon SNS notification. UTF-8 is easier to use, but may not preserve all special characters when a message was encoded with a different encoding format. Base64 preserves all special characters. The default value is UTF-8.

Type: String

Valid Values: UTF-8 | Base64

Required: No

### TopicArn

The Amazon Resource Name (ARN) of the Amazon SNS topic to notify. An example of an Amazon SNS topic ARN is `arn:aws:sns:us-west-2:123456789012:MyTopic`. For more information about Amazon SNS topics, see the [Amazon SNS Developer Guide](#).

Type: String

Required: Yes

## StopAction

When included in a receipt rule, this action terminates the evaluation of the receipt rule set and, optionally, publishes a notification to Amazon Simple Notification Service (Amazon SNS).

For information about setting a stop action in a receipt rule, see the [Amazon SES Developer Guide](#).

### Contents

#### Scope

The scope to which the Stop action applies. That is, what is being stopped.

Type: String

Valid Values: `RuleSet`

Required: Yes

#### TopicArn

The Amazon Resource Name (ARN) of the Amazon SNS topic to notify when the stop action is taken.

An example of an Amazon SNS topic ARN is `arn:aws:sns:us-west-2:123456789012:MyTopic`.

For more information about Amazon SNS topics, see the [Amazon SNS Developer Guide](#).

Type: String

Required: No

## WorkmailAction

When included in a receipt rule, this action calls Amazon WorkMail and, optionally, publishes a notification to Amazon Simple Notification Service (Amazon SNS). You will typically not use this action directly because Amazon WorkMail adds the rule automatically during its setup procedure.

For information using a receipt rule to call Amazon WorkMail, see the [Amazon SES Developer Guide](#).

### Contents

#### OrganizationArn

The ARN of the Amazon WorkMail organization. An example of an Amazon WorkMail organization ARN is

`arn:aws:workmail:us-west-2:123456789012:organization/m-68755160c4cb4e29a2b2f8fb58f359d7`.

For information about Amazon WorkMail organizations, see the [Amazon WorkMail Administrator Guide](#).

Type: String

Required: Yes

#### TopicArn

The Amazon Resource Name (ARN) of the Amazon SNS topic to notify when the WorkMail action is called. An example of an Amazon SNS topic ARN is

`arn:aws:sns:us-west-2:123456789012:MyTopic`. For more information about Amazon SNS topics, see the [Amazon SNS Developer Guide](#).

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