
AWS CloudFormation

API Reference

API Version 2010-05-15



AWS CloudFormation: API Reference

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Welcome

This is the AWS CloudFormation API Reference. The major sections of this guide are described in the following table.

- [Actions](#): Alphabetical list of CloudFormation actions
- [Data Types](#): Alphabetical list of CloudFormation data types
- [Common Parameters](#): Parameters that all Query actions can use
- [Common Errors](#): Client and server errors that all actions can return

This guide is for programmers who need detailed information about the CloudFormation APIs. You use AWS CloudFormation to create and manage AWS infrastructure deployments predictably and repeatedly. CloudFormation helps you leverage AWS products such as Amazon EC2, EBS, Amazon SNS, ELB, and Auto Scaling to build highly-reliable, highly scalable, cost effective applications without worrying about creating and configuring the underlying the AWS infrastructure.

Through the use of a template file you write, and a few AWS CloudFormation commands or API actions, AWS CloudFormation enables you to manage a collection of resources together as a single unit called a stack. AWS CloudFormation creates and deletes all member resources of the stack together and manages all dependencies between the resources for you.

For more information about this product, go to the [CloudFormation Product Page](#).

Amazon CloudFormation makes use of other AWS products. If you need additional technical information about a specific AWS product, you can find the product's technical documentation at <http://aws.amazon.com/documentation/>.

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Actions

The actions described in this guide are called using the AWS Query protocol.

The following actions are supported:

- [CreateStack](#) (p. 3)
- [DeleteStack](#) (p. 6)
- [DescribeStackEvents](#) (p. 7)
- [DescribeStackResources](#) (p. 9)
- [DescribeStacks](#) (p. 12)
- [GetTemplate](#) (p. 14)
- [ListStacks](#) (p. 16)
- [ValidateTemplate](#) (p. 18)

CreateStack

Description

Creates a stack as specified in the template. Once the call completes successfully, the stack creation starts. You can check the status of the stack via the [DescribeStacks \(p. 12\)](#) API.



Note

Currently, the limit for stacks is 20 stacks per account per region.

Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 29\)](#).

Name	Description	Required
<i>DisableRollback</i>	Boolean to enable or disable rollback on stack creation failures. Default: <code>false</code> Type: Boolean	No
<i>NotificationARNs.member.N</i>	The Simple Notification Service (SNS) topic ARNs to publish stack related events. You can find your SNS topic ARNs using the SNS console or your Command Line Interface (CLI). Type: String list Length constraints: Minimum of 0 item(s) in the list. Maximum of 5 item(s) in the list.	No
<i>Parameters.member.N</i>	A list of <code>Parameter</code> structures. Type: Parameter (p. 23) list	No
<i>StackName</i>	The name associated with the stack. The name must be unique within your AWS account. Note Must contain only alphanumeric characters (case sensitive) and start with an alpha character. Maximum length of the name is 255 characters. Type: String	Yes
<i>TemplateBody</i>	Structure containing the template body. (For more information, go to the AWS CloudFormation User Guide .) Condition: You must pass <code>TemplateBody</code> or <code>TemplateURL</code> . If both are passed, only <code>TemplateBody</code> is used. Type: String Length constraints: Minimum value of 1.	No

Name	Description	Required
<i>TemplateURL</i>	<p>Location of file containing the template body. The URL must point to a template located in an S3 bucket in the same region as the stack. For more information, go to the AWS CloudFormation User Guide.</p> <p>Conditional: You must pass <code>TemplateURL</code> or <code>TemplateBody</code>. If both are passed, only <code>TemplateBody</code> is used.</p> <p>Type: String</p> <p>Length constraints: Minimum value of 1. Maximum value of 1024.</p>	No
<i>TimeoutInMinutes</i>	<p>The amount of time that can pass before the stack status becomes <code>CREATE_FAILED</code>; if <code>DisableRollback</code> is not set or is set to <code>false</code>, the stack will be rolled back.</p> <p>Type: Integer</p>	No

Response Elements

The following elements come wrapped in a `CreateStackResult` structure.

Name	Description
<code>StackId</code>	<p>Unique identifier of the stack.</p> <p>Type: String</p>

Errors

For information about the common errors that all actions use, see [Common Errors \(p. 31\)](#).

Error	Description	HTTP Status Code
<code>AlreadyExists</code>	Resource with the name requested already exists.	400
<code>LimitExceeded</code>	Quota for the resource has already been reached.	400

Examples

Sample Request

```
https://cloudformation.us-east-1.amazonaws.com/
?Action=CreateStack
&StackName=MyStack
&TemplateBody=[Template Document]
&NotificationARNs.member.1=arn:aws:sns:us-east-1:1234567890:my-topic
&Parameters.member.1.ParameterKey=AvailabilityZone
```

```
&Parameters.member.1.ParameterValue=us-east-1a
&Version=2010-05-15
&SignatureVersion=2
&Timestamp=2010-07-27T22%3A26%3A28.000Z
&AWSAccessKeyId=[AWS Access KeyID]
&Signature=[Signature]
```

Sample Response

```
<CreateStackResult>
  <StackId>arn:aws:cloudformation:us-east-1:123456789:stack/MyStack/aaf549a0-
a413-11df-adb3-5081b3858e83</StackId>
</CreateStackResult>
```

DeleteStack

Description

Deletes a specified stack. Once the call completes successfully, stack deletion starts. Deleted stacks do not show up in the [DescribeStacks](#) (p. 12) API if the deletion has been completed successfully.

Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters](#) (p. 29).

Name	Description	Required
<i>StackName</i>	The name or the unique identifier associated with the stack. Type: String	Yes

Examples

Sample Request

```
https://cloudformation.us-east-1.amazonaws.com/  
?Action=DeleteStack  
&StackName=MyStack  
&Version=2010-05-15  
&SignatureVersion=2  
&Timestamp=2010-07-27T22%3A26%3A28.000Z  
&AWSAccessKeyId=[AWS Access KeyID]  
&Signature=[Signature]
```

Sample Response

```
<DeleteStackResult/>
```

DescribeStackEvents

Description

Returns all the stack related events for the AWS account. If `StackName` is specified, returns events related to all the stacks with the given name. If `StackName` is not specified, returns all the events for the account. For more information about a stack's event history, go to the [AWS CloudFormation User Guide](#).



Note

Events are returned, even if the stack never existed or has been successfully deleted.

Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 29\)](#).

Name	Description	Required
<code>NextToken</code>	String that identifies the start of the next list of events, if there is one. Default: There is no default value. Type: String Length constraints: Minimum value of 1. Maximum value of 1024.	No
<code>StackName</code>	The name or the unique identifier associated with the stack. Default: There is no default value. Type: String	No

Response Elements

The following elements come wrapped in a `DescribeStackEventsResult` structure.

Name	Description
<code>NextToken</code>	String that identifies the start of the next list of events, if there is one. Type: String
<code>StackEvents</code>	A list of <code>StackEvents</code> structures. Type: StackEvent (p. 24) list

Examples

Sample Request

```
https://cloudformation.us-east-1.amazonaws.com/
?Action=DescribeStackEvents
&StackName=MyStack
&Version=2010-05-15
&SignatureVersion=2
&Timestamp=2010-07-27T22%3A26%3A28.000Z
```

```
&AWSSecretKeyId=[AWS Secret KeyID]  
&Signature=[Signature]
```

Sample Response

```
<DescribeStackEventsResult>  
  <StackEvents>  
    <member>  
      <EventId>Event-1-Id</EventId>  
      <StackId>arn:aws:cloudformation:us-east-1:123456789:stack/MyStack/aaf549a0-  
a413-11df-adb3-5081b3858e83</StackId>  
      <StackName>MyStack</StackName>  
      <LogicalResourceId>MyStack</LogicalResourceId>  
      <PhysicalResourceId>MyStack_One</PhysicalResourceId>  
      <ResourceType>AWS::CloudFormation::Stack</ResourceType>  
      <Timestamp>2010-07-27T22:26:28Z</Timestamp>  
      <ResourceStatus>CREATE_IN_PROGRESS</ResourceStatus>  
      <ResourceStatusReason>User initiated</ResourceStatusReason>  
    </member>  
    <member>  
      <EventId>Event-2-Id</EventId>  
      <StackId>arn:aws:cloudformation:us-east-1:123456789:stack/MyStack/aaf549a0-  
a413-11df-adb3-5081b3858e83</StackId>  
      <StackName>MyStack</StackName>  
      <LogicalResourceId>MyDBInstance</LogicalResourceId>  
      <PhysicalResourceId>MyStack_DB1</PhysicalResourceId>  
      <ResourceType>AWS::SecurityGroup</ResourceType>  
      <Timestamp>2010-07-27T22:27:28Z</Timestamp>  
      <ResourceStatus>CREATE_IN_PROGRESS</ResourceStatus>  
      <ResourceProperties>{"GroupDescription":...}</ResourceProperties>  
    </member>  
    <member>  
      <EventId>Event-3-Id</EventId>  
      <StackId>arn:aws:cloudformation:us-east-1:123456789:stack/MyStack/aaf549a0-  
a413-11df-adb3-5081b3858e83</StackId>  
      <StackName>MyStack</StackName>  
      <LogicalResourceId>MySG1</LogicalResourceId>  
      <PhysicalResourceId>MyStack_SG1</PhysicalResourceId>  
      <ResourceType>AWS::SecurityGroup</ResourceType>  
      <Timestamp>2010-07-27T22:28:28Z</Timestamp>  
      <ResourceStatus>CREATE_COMPLETE</ResourceStatus>  
    </member>  
  </StackEvents>  
</DescribeStackEventsResult>
```

DescribeStackResources

Description

Returns AWS resource descriptions for running and deleted stacks. If `StackName` is specified, all the associated resources that are part of the stack are returned. If `PhysicalResourceId` is specified, all the associated resources of the stack the resource belongs to are returned.

For deleted stacks, `DescribeStackResources` returns resource information for up to 90 days after the stack has been deleted.

You must specify `StackName` or `PhysicalResourceId`. In addition, you can specify `LogicalResourceId` to filter the returned result. For more information about resources, the `LogicalResourceId` and `PhysicalResourceId`, go to the [AWS CloudFormation User Guide](#).



Note

A `ValidationError` is returned if you specify both `StackName` and `PhysicalResourceId` in the same request.

Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 29\)](#).

Name	Description	Required
<i>LogicalResourceId</i>	The logical name of the resource as specified in the template. Default: There is no default value. Type: String	No
<i>PhysicalResourceId</i>	The name or unique identifier that corresponds to a physical instance ID of a resource supported by AWS CloudFormation. For example, for an Amazon Elastic Compute Cloud (EC2) instance, <code>PhysicalResourceId</code> corresponds to the <code>InstanceId</code> . You can pass the EC2 <code>InstanceId</code> to <code>DescribeStackResources</code> to find which stack the instance belongs to and what other resources are part of the stack. Default: There is no default value. Type: String	No
<i>StackName</i>	The name or the unique identifier associated with the stack. Default: There is no default value. Type: String	No

Response Elements

The following elements come wrapped in a `DescribeStackResourcesResult` structure.

Name	Description
StackResources	A list of StackResource structures. Type: StackResource (p. 25) list

Errors

For information about the common errors that all actions use, see [Common Errors \(p. 31\)](#).

Error	Description	HTTP Status Code
ValidationError	The specified stack or resource does not exist. In the case of DescribeStackResources, this error is returned if you specify both StackName and PhysicalResourceId in the same request.	400

Examples

Sample Request

```
https://cloudformation.us-east-1.amazonaws.com/
?Action=DescribeStackResources
&StackName=MyStack
&Version=2010-05-15
&SignatureVersion=2
&Timestamp=2010-07-27T22%3A26%3A28.000Z
&AWSAccessKeyId=[AWS Access KeyID]
&Signature=[Signature]
```

Sample Response

```
<DescribeStackResourcesResult>
  <StackResources>
    <member>
      <StackId>arn:aws:cloudformation:us-east-1:123456789:stack/MyStack/aaf549a0-
a413-11df-adb3-5081b3858e83</StackId>
      <StackName>MyStack</StackName>
      <LogicalResourceId>MyDBInstance</LogicalResourceId>
      <PhysicalResourceId>MyStack_DB1</PhysicalResourceId>
      <ResourceType>AWS::DBInstance</ResourceType>
      <Timestamp>2010-07-27T22:27:28Z</Timestamp>
      <ResourceStatus>CREATE_COMPLETE</ResourceStatus>
    </member>
    <member>
      <StackId>arn:aws:cloudformation:us-east-1:123456789:stack/MyStack/aaf549a0-
a413-11df-adb3-5081b3858e83</StackId>
      <StackName>MyStack</StackName>
      <LogicalResourceId>MyAutoScalingGroup</LogicalResourceId>
      <PhysicalResourceId>MyStack_ASG1</PhysicalResourceId>
```

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```
<ResourceType>AWS::AutoScalingGroup</ResourceType>
<Timestamp>2010-07-27T22:28:28Z</Timestamp>
<ResourceStatus>CREATE_IN_PROGRESS</ResourceStatus>
</member>
</StackResources>
</DescribeStackResourcesResult>
```

DescribeStacks

Description

Returns the description for the specified stack; if no stack name was specified, then it returns the description for all the stacks created.

Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 29\)](#).

Name	Description	Required
<i>StackName</i>	The name or the unique identifier associated with the stack. Default: There is no default value. Type: String	No

Response Elements

The following elements come wrapped in a `DescribeStacksResult` structure.

Name	Description
Stacks	A list of stack structures. Type: Stack (p. 23) list

Examples

Sample Request

```
https://cloudformation.us-east-1.amazonaws.com/
?Action=DescribeStacks
&StackName=MyStack
&Version=2010-05-15
&SignatureVersion=2
&Timestamp=2010-07-27T22%3A26%3A28.000Z
&AWSAccessKeyId=[AWS Access KeyID]
&Signature=[Signature]
```

Sample Response

```
<DescribeStacksResult>
  <Stacks>
    <member>
      <StackName>MyStack</StackName>
      <StackId>arn:aws:cloudformation:us-east-1:123456789:stack/MyStack/aaf549a0-
a413-11df-adb3-5081b3858e83</StackId>
```

```
<CreationTime>2010-07-27T22:28:28Z</CreationTime>
<StackStatus>CREATE_COMPLETE</StackStatus>
<DisableRollback>>false</DisableRollback>
<Outputs>
  <member>
    <OutputKey>StartPage</OutputKey>
    <OutputValue>http://my-load-
balancer.amazonaws.com:80/index.html</OutputValue>
  </member>
</Outputs>
</member>
</Stacks>
</DescribeStacksResult>
```

GetTemplate

Description

Returns the template body for a specified stack name. You can get the template for running or deleted stacks.

For deleted stacks, GetTemplate returns the template for up to 90 days after the stack has been deleted.



Note

If the template does not exist, a `ValidationError` is returned.

Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 29\)](#).

Name	Description	Required
<code>StackName</code>	The name or the unique identifier associated with the stack. Type: String	Yes

Response Elements

The following elements come wrapped in a `GetTemplateResult` structure.

Name	Description
<code>TemplateBody</code>	Structure containing the template body. (For more information, go to the AWS CloudFormation User Guide .) Type: String

Errors

For information about the common errors that all actions use, see [Common Errors \(p. 31\)](#).

Error	Description	HTTP Status Code
<code>ValidationError</code>	The specified stack or resource does not exist. In the case of <code>DescribeStackResources</code> , this error is returned if you specify both <code>StackName</code> and <code>PhysicalResourceId</code> in the same request.	400

Examples

Sample Request

```
https://cloudformation.us-east-1.amazonaws.com/  
?Action=GetTemplate  
&StackName=MyStack  
&Version=2010-05-15  
&SignatureVersion=2  
&Timestamp=2010-07-27T22%3A26%3A28.000Z  
&AWSAccessKeyId=[AWS Access KeyID]  
&Signature=[Signature]
```

Sample Response

```
<GetTemplateResult>  
  <TemplateBody>{"  
    "AWSTemplateFormatVersion" : "2010-09-09",  
    "Description" : "Simple example",  
    "Resources" : {  
      "MySQS" : {  
        "Type" : "AWS::SQS::Queue",  
        "Properties" : {  
          }  
        }  
      }  
    }  
  }</TemplateBody>  
</GetTemplateResult>
```

ListStacks

Description

Returns the description for stacks whose status matches the specified `StackStatusFilter`. If no `StackStatusFilter` is specified, then it returns description for stacks that have been assigned the status `DELETE_COMPLETE` within the past 90 days.

Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 29\)](#).

Name	Description	Required
<code>NextToken</code>	Type: String Length constraints: Minimum value of 1. Maximum value of 1024.	No
<code>StackStatusFilter.member.N</code>	Type: String list	No

Response Elements

The following elements come wrapped in a `ListStacksResult` structure.

Name	Description
<code>NextToken</code>	Type: String
<code>StackSummaries</code>	Type: StackSummary (p. 26) list

Examples

Sample Request

```
https://cloudformation.us-east-1.amazonaws.com/
?Action=ListStacks
&StackStatusFilter.member.1=CREATE_IN_PROGRESS
&StackStatusFilter.member.2=DELETE_COMPLETE
&Version=2010-05-15
&SignatureVersion=2
&SignatureMethod=HmacSHA256
&Timestamp=2010-07-27T22%3A26%3A28.000Z
&AWSAccessKeyId=[AWS Access KeyID]
&Signature=[Signature]
```

Sample Response

```
<ListStacksResponse><ListStacksResult>
  <StackSummaries>
```

```
<member>
  <StackId>
    arn:aws:cloudformation:us-east-1:1234567:stack/TestCreate1/aaaaa
  </StackId>
  <StackStatus>CREATE_IN_PROGRESS</StackStatus>
  <StackName>vpcl</StackName>
  <CreationTime>2011-05-23T15:47:44Z</CreationTime>
  <TemplateDescription>
    Creates one EC2 instance and a load balancer.
  </TemplateDescription>
</member>
<member>
  <StackId>
    arn:aws:cloudformation:us-east-1:1234567:stack/TestDelete2/bbbbb
  </StackId>
  <StackStatus>DELETE_COMPLETE</StackStatus>
  <DeletionTime>2011-03-10T16:20:51Z</DeletionTime>
  <StackName>WP1</StackName>
  <CreationTime>2011-03-05T19:57:58Z</CreationTime>
  <TemplateDescription>
    A simple basic Cloudformation Template.
  </TemplateDescription>
</member>
</StackSummaries>
</ListStacksResult></ListStacksResponse>
```

ValidateTemplate

Description

Validates a specified template.

Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 29\)](#).

Name	Description	Required
<i>TemplateBody</i>	String containing the template body. (For more information, go to the AWS CloudFormation User Guide .) Conditional: You must pass <code>TemplateURL</code> or <code>TemplateBody</code> . If both are passed, only <code>TemplateBody</code> is used. Type: String Length constraints: Minimum value of 1.	No
<i>TemplateURL</i>	Location of file containing the template body. The URL must point to a template located in an S3 bucket in the same region as the stack. For more information, go to the AWS CloudFormation User Guide . Conditional: You must pass <code>TemplateURL</code> or <code>TemplateBody</code> . If both are passed, only <code>TemplateBody</code> is used. Type: String Length constraints: Minimum value of 1. Maximum value of 1024.	No

Response Elements

The following elements come wrapped in a `ValidateTemplateResult` structure.

Name	Description
<code>Description</code>	The description found within the template. Type: String
<code>Parameters</code>	A list of <code>TemplateParameter</code> structures. Type: TemplateParameter (p. 27) list

Errors

For information about the common errors that all actions use, see [Common Errors \(p. 31\)](#).

Error	Description	HTTP Status Code
<code>ValidationError</code>	The specified stack or resource does not exist. In the case of <code>DescribeStackResources</code> , this error is returned if you specify both <code>StackName</code> and <code>PhysicalResourceId</code> in the same request.	400

Examples

Sample Request

```
https://cloudformation.us-east-1.amazonaws.com/  
?Action=ValidateTemplate  
&TemplateBody=http://myTemplateRepository/TemplateOne.template  
&Version=2010-05-15  
&SignatureVersion=2  
&Timestamp=2010-07-27T22%3A26%3A28.000Z  
&AWSAccessKeyId=[AWS Access KeyID]  
&Signature=[Signature]
```

Sample Response

```
<ValidateTemplateResult>  
  <TemplateParameter>  
PARAMETERS KeyPair false The EC2 Key Pair to allow SSH access  
to the instances  
PARAMETERS WebServerPort 8888 false The TCP port for the Web Server  
PARAMETERS InstanceType m1.small false Type of instance to launch (Note:  
The AMI is a 32bit AMI, so the instance must be capable of running a 32bit  
image)  
  </TemplateParameter>  
</ValidateTemplateResult>
```

Data Types

The AWS CloudFormation API contains several data types that various actions use. This section describes each data type in detail.

**Note**

The order of each element in the response is not guaranteed. Applications should not assume a particular order.

The following data types are supported:

- [CreateStackResult](#) (p. 21)
- [DescribeStackEventsResult](#) (p. 21)
- [DescribeStackResourcesResult](#) (p. 21)
- [DescribeStacksResult](#) (p. 22)
- [GetTemplateResult](#) (p. 22)
- [ListStacksResult](#) (p. 22)
- [Output](#) (p. 23)
- [Parameter](#) (p. 23)
- [Stack](#) (p. 23)
- [StackEvent](#) (p. 24)
- [StackResource](#) (p. 25)
- [StackSummary](#) (p. 26)
- [TemplateParameter](#) (p. 27)
- [ValidateTemplateResult](#) (p. 27)

CreateStackResult

Description

The output for a [CreateStack](#) (p. 3) action.

Contents

Name	Description
StackId	Unique identifier of the stack. Type: String

DescribeStackEventsResult

Description

The output for a [DescribeStackEvents](#) (p. 7) action.

Contents

Name	Description
NextToken	String that identifies the start of the next list of events, if there is one. Type: String Length constraints: Minimum value of 1. Maximum value of 1024.
StackEvents	A list of <code>StackEvents</code> structures. Type: StackEvent (p. 24) list

DescribeStackResourcesResult

Description

The output for a [DescribeStackResources](#) (p. 9) action.

Contents

Name	Description
StackResources	A list of <code>StackResource</code> structures. Type: StackResource (p. 25) list

DescribeStacksResult

Description

The output for a [DescribeStacks](#) (p. 12) action.

Contents

Name	Description
Stacks	A list of stack structures. Type: Stack (p. 23) list

GetTemplateResult

Description

The output for [GetTemplate](#) (p. 14) action.

Contents

Name	Description
TemplateBody	Structure containing the template body. (For more information, go to the AWS CloudFormation User Guide .) Type: String Length constraints: Minimum value of 1.

ListStacksResult

Description

No action documentation available.

Contents

Name	Description
NextToken	Type: String Length constraints: Minimum value of 1. Maximum value of 1024.
StackSummaries	Type: StackSummary (p. 26) list

Output

Description

The Output data type.

Contents

Name	Description
Description	User defined description associated with the output. Type: String
OutputKey	The key associated with the output. Type: String
OutputValue	The value associated with the output. Type: String

Parameter

Description

The Parameter data type.

Contents

Name	Description
ParameterKey	The key associated with the parameter. Type: String
ParameterValue	The value associated with the parameter. Type: String

Stack

Description

The Stack data type.

Contents

Name	Description
CreationTime	Time at which the stack was created. Type: DateTime
Description	User defined description associated with the stack. Type: String
DisableRollback	Boolean to enable or disable rollback on stack creation failures: <ul style="list-style-type: none"> • true: disable rollback • false: enable rollback Type: Boolean
NotificationARNs	SNS topic ARNs to which stack related events are published. Type: String list Length constraints: Minimum of 0 item(s) in the list. Maximum of 5 item(s) in the list.
Outputs	A list of output structures. Type: Output (p. 23) list
Parameters	A list of Parameter structures. Type: Parameter (p. 23) list
StackId	Unique identifier of the stack. Type: String
StackName	The name associated with the stack. Type: String
StackStatus	Current status of the stack. Type: String Valid Values: CREATE_IN_PROGRESS CREATE_FAILED CREATE_COMPLETE ROLLBACK_IN_PROGRESS ROLLBACK_FAILED ROLLBACK_COMPLETE DELETE_IN_PROGRESS DELETE_FAILED
StackStatusReason	Success/failure message associated with the stack status. Type: String
TimeoutInMinutes	The amount of time within which stack creation should complete. Type: Integer

StackEvent

Description

The StackEvent data type.

Contents

Name	Description
EventId	The unique ID of this event. Type: String
LogicalResourceId	The logical name of the resource specified in the template. Type: String
PhysicalResourceId	The name or unique identifier associated with the physical instance of the resource. Type: String
ResourceProperties	BLOB of the properties used to create the resource. Type: String
ResourceStatus	Current status of the resource. Type: String Valid Values: CREATE_IN_PROGRESS CREATE_FAILED CREATE_COMPLETE DELETE_IN_PROGRESS DELETE_FAILED DELETE_COMPLETE
ResourceStatusReason	Success/failure message associated with the resource. Type: String
ResourceType	Type of the resource. (For more information, go to the AWS CloudFormation User Guide .) Type: String
StackId	The unique ID name of the instance of the stack. Type: String
StackName	The name associated with a stack. Type: String
Timestamp	Time the status was updated. Type: DateTime

StackResource

Description

The StackResource data type.

Contents

Name	Description
Description	User defined description associated with the resource. Type: String

Name	Description
LogicalResourceId	The logical name of the resource specified in the template. Type: String
PhysicalResourceId	The name or unique identifier that corresponds to a physical instance ID of a resource supported by AWS CloudFormation. Type: String
ResourceStatus	Current status of the resource. Type: String Valid Values: CREATE_IN_PROGRESS CREATE_FAILED CREATE_COMPLETE DELETE_IN_PROGRESS DELETE_FAILED DELETE_COMPLETE
ResourceStatusReason	Success/failure message associated with the resource. Type: String
ResourceType	Type of the resource. (For more information, go to the AWS CloudFormation User Guide .) Type: String
StackId	Unique identifier of the stack. Type: String
StackName	The name associated with the stack. Type: String
Timestamp	Time the status was updated. Type: DateTime

StackSummary

Description

The StackSummary Data Type

Contents

Name	Description
CreationTime	The time the stack was created. Type: DateTime
DeletionTime	The time the stack was deleted. Type: DateTime
StackId	Unique stack identifier. Type: String
StackName	The name associated with the stack. Type: String

Name	Description
StackStatus	The status of the stack when it was deleted. Type: String Valid Values: CREATE_IN_PROGRESS CREATE_FAILED CREATE_COMPLETE ROLLBACK_IN_PROGRESS ROLLBACK_FAILED ROLLBACK_COMPLETE DELETE_IN_PROGRESS DELETE_FAILED
TemplateDescription	The template description of the template used to create the stack. Type: String

TemplateParameter

Description

The TemplateParameter data type.

Contents

Name	Description
DefaultValue	The default value associated with the parameter. Type: String
Description	User defined description associated with the parameter. Type: String
NoEcho	Flag indicating whether the parameter should be displayed as plain text in logs and UIs. Type: Boolean
ParameterKey	The name associated with the parameter. Type: String

ValidateTemplateResult

Description

The output for [ValidateTemplate](#) (p. 18) action.

Contents

Name	Description
Description	The description found within the template. Type: String

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Name	Description
Parameters	A list of <code>TemplateParameter</code> structures. Type: TemplateParameter (p. 27) list

Common Query Parameters

This section lists the request parameters that all actions use. Any action-specific parameters are listed in the topic for the action.

Parameter Name	Description	Required
<i>Action</i>	The action to perform. Default: None Type: String	Yes
<i>AuthParams</i>	The parameters required to authenticate a query request. Contains: AWSAccessKeyId SignatureVersion Timestamp Signature Default: None	Conditional
<i>AWSAccessKeyId</i>	The Access Key ID corresponding to the AWS Secret Access Key you used to sign the request. Default: None Type: String	Yes
<i>Expires</i>	The date and time at which the request signature expires, in the format YYYY-MM-DDThh:mm:ssZ, as specified in the ISO 8601 standard. Condition: Requests must include either <i>Timestamp</i> or <i>Expires</i> , but not both. Default: None Type: String	Conditional

Parameter Name	Description	Required
<i>Signature</i>	The digital signature you created for the request. Refer to the service's developer documentation for information about how to generate the signature. Default: None Type: String	Yes
<i>SignatureMethod</i>	The hash algorithm you used to create the request signature. Default: None Valid Values: HmacSHA256 HmacSHA1. Type: String	Yes
<i>SignatureVersion</i>	The signature version you use to sign the request. Set this to the value recommended in your product-specific documentation on security. Default: None Type: String	Yes
<i>Timestamp</i>	The date and time the request was signed, in the format YYYY-MM-DDThh:mm:ssZ, as specified in the ISO 8601 standard. Condition: Requests must include either <i>Timestamp</i> or <i>Expires</i> , but not both. Default: None Type: String	Conditional
<i>Version</i>	The API version to use, in the format YYYY-MM-DD. Default: None Type: String	Yes

Common Errors

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

Error	Description	HTTP Status Code
<code>IncompleteSignature</code>	The request signature does not conform to AWS standards.	400
<code>InternalFailure</code>	The request processing has failed due to some unknown error, exception or failure.	500
<code>InvalidAction</code>	The action or operation requested is invalid.	400
<code>InvalidClientTokenId</code>	The X.509 certificate or AWS Access Key ID provided does not exist in our records.	403
<code>InvalidParameterCombination</code>	Parameters that must not be used together were used together.	400
<code>InvalidParameterValue</code>	A bad or out-of-range value was supplied for the input parameter.	400
<code>InvalidQueryParameter</code>	AWS query string is malformed, does not adhere to AWS standards.	400
<code>MalformedQueryString</code>	The query string is malformed.	404
<code>MissingAction</code>	The request is missing an action or operation parameter.	400
<code>MissingAuthenticationToken</code>	Request must contain either a valid (registered) AWS Access Key ID or X.509 certificate.	403
<code>MissingParameter</code>	An input parameter that is mandatory for processing the request is not supplied.	400

Error	Description	HTTP Status Code
OptInRequired	The AWS Access Key ID needs a subscription for the service.	403
RequestExpired	Request is past expires date or the request date (either with 15 minute padding), or the request date occurs more than 15 minutes in the future.	400
ServiceUnavailable	The request has failed due to a temporary failure of the server.	503
Throttling	Request was denied due to request throttling.	400