
AWS CloudFormation

AWS CloudFormation CLI Reference

Important: The prior AWS CloudFormation command line interface (CLI) is available but not recommended. Instead, use the [AWS Command Line Interface](#). This reference is part of a previous version of the *AWS CloudFormation User Guide* and is provided to users who must still use the prior AWS CloudFormation CLI.



Command Line Tools Reference

The CloudFormation *CLI tools* enable you to manage your CloudFormation stacks directly from your computer's command-line interface (CLI). They are distinct from the [helper scripts \(p. 416\)](#), which are installed on Amazon EC2 instances that you create with CloudFormation..

This section describes each CloudFormation CLI tool in detail. For information about downloading and installing the AWS CloudFormation CLI, see [Installing the AWS CloudFormation Command Line Interface \(CLI\) \(p. 63\)](#).

Note

You must call the CLI as a regular IAM user. AWS CloudFormation does not support calling the CLI with an [IAM role](#).

Topics

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Common Options for CloudFormation CLI Tools

Many CLI tools described in this section accept optional parameters described in this topic. For details, see the reference page for the tool you are using, or type `toolname --help` on the command-line, where *toolname* is the name of the command (such as `cfn-describe-stacks`).

--aws-credential-file *VALUE*

Location of the file with your AWS credentials. This value can be set automatically by using the environment variable 'AWS_CREDENTIAL_FILE'.

--connection-timeout *VALUE*

Specify a connection timeout *VALUE* (in seconds). The default value is '30'.

--delimiter *VALUE*

Specify the delimiter to use when displaying delimited (long) results.

--headers

If you are displaying tabular or delimited results, it includes the column headers. If you are showing xml results, it returns the HTTP headers from the service request, if applicable. This setting is off by default.

-I, --access-key-id *VALUE*

Specify *VALUE* as the AWS Access ID to use.

-K, --ec2-private-key-file-path *VALUE*

The private key file path. This value can be set automatically by using the environment variable 'EC2_PRIVATE_KEY'.

--region *VALUE*

Specify region *VALUE* as the web service region to use. This value can be set by using the environment variable 'EC2_REGION'.

-S, --secret-key *VALUE*

Specify *VALUE* as the AWS Secret Key to use.

--show-empty-fields

Show empty fields and rows, using a "(nil)" value. The default is to suppress empty fields or columns.

--show-request

Displays the URL the tools used to call the AWS Service. The default value is 'false'.

--show-table, --show-long, --show-xml, --quiet

Specify how the results are displayed: tabular, delimited (long), xml, or no output (quiet). Tabular shows a subset of the data in fixed column-width form, while long shows all of the returned values delimited by a character. The xml is the raw return from the service, while quiet suppresses all standard output. The default is tabular, or 'show-table'.

-U, --url *VALUE*

This option will override the URL for the service call with *VALUE*. This value can be set by using the environment variable 'AWS_CLOUDFORMATION_URL'.

cfn-cancel-update-stack

Description

Cancels a stack update that is currently in progress (with state `UPDATE_IN_PROGRESS`). The stack will be rolled back, reverting the configuration of all resources updated up to that point to their configuration before the update.

Syntax

```
cfn-cancel-update-stack StackName [--force] [common-options (p. 427)]
```

Options

StackName | **--stack-name** *stack name* | **-s** *stack name*

The name or ID of the stack. You can specify the stack name by itself, or preface it with either the `--stack` or `-s` switches. Any of these forms is equivalent.

Type: String.

Required: Yes.

Default: none

Example:

```
$ cfn-cancel-update-stack example-stack
```

--force

Cancel the stack update without prompting.

Type: Boolean.

Required: No. Default is to prompt before canceling the stack.

Example:

```
$ cfn-cancel-update-stack example-stack --force
```

Output

`cfn-cancel-update-stack` returns no output.

If the command is successful, the stack will be rolled back to its configuration before the update and its state will be set to `UPDATE_ROLLBACK_COMPLETE`.

Examples

Example Example Request

Cancel a stack update for the stack named `example-stack` using the long form of the `StackName` option (this can be useful for clarity, particularly when scripting).

```
$ cfn-cancel-update-stack --stack-name example-stack
```

cfn-create-stack

Description

Create a new stack from a template stored in a local file or in an Amazon S3 bucket. If any resource defined in the template cannot be created, the stack will be rolled back, deleting all resources created up to that point. This behavior can be disabled by using the `--disable-rollback` option.

Syntax

`cfn-create-stack` *StackName* `common-options` (p. 427) *cfn-create-stack-options*

The *cfn-create-stack-options* that you can specify are described in the **Options** section of this topic.

Options

Name	Description	Required
<i>StackName</i>	Name of the Stack. A stack name must contain only alphanumeric characters and must start with an alphabetic character. The maximum length of the name is 255 characters. Stack names are case sensitive. You can also set this value using <code>--stack-name</code> . Type: String Default: None Example: webserv	Yes
<code>-d,</code> <code>--disable-rollback</code>	Flag to disable rollback of created resources when failures are encountered during stack creation. The default value is <code>false</code> . Type: String Default: None	No
<code>--template-file</code> <i>VALUE</i>	Path to the file that contains the template. An uploaded template can be, at most, 51200 bytes. Type: String Default: None	No
<code>-n,</code> <code>--notification-arns</code> <i>VALUE1, VALUE2,</i> <i>VALUE3...</i>	SNS ARNs to receive notification about the stack. Type: String Default: None	No
<code>-p,</code> <code>--parameters</code> <i>"key1=value1;</i> <i>key2=value2 ..."</i>	Parameter values used to create the stack. Type: String Default: None	No

Name	Description	Required
<code>-t, --timeout VALUE</code>	Stack creation timeout in minutes. Type: String Default: None	No
<code>--tag "Key=value; Value=value"</code>	A set of user-defined Tags to associate with this stack, represented by key/value pairs. This option can be repeated to specify a number of such pairs. Type: String Example: <code>--tag "Key=Purpose; Value=Testing"</code> <code>--tag "Key=endpoint; Value=us-east-1"</code>	No
<code>-u, --template-url VALUE</code>	Path of the URL that contains the template. The URL must point to a template (max size: 307,200 bytes) in an Amazon S3 bucket that you have read permissions to, located in the same region as the stack. The URL itself can be, at most, 1024 characters long. Type: String Default: None	No
<code>-c, --capabilities VALUE</code>	The list of capabilities that you want to allow in the stack. If your template contains IAM resources, you must specify the CAPABILITY_IAM value for this parameter; otherwise, this action returns an InsufficientCapabilities error. IAM resources are the following: AWS::IAM::AccessKey (p. 322), AWS::IAM::Group (p. 324), AWS::IAM::Policy (p. 327), AWS::IAM::UserToGroupAddition (p. 335), and AWS::IAM::User (p. 334). For more information about using IAM resources in templates, see Controlling User Access with AWS Identity and Access Management (p. 196). Type: String Valid Values: CAPABILITY_IAM Default: None	No

Output

This command returns a table that contains the following:

- `STACK_ID`
Unique Identifier for the Stack

AWS CloudFormation displays errors on stderr.

Examples

Example Request

Create a Stack named `example-stack` using template located in file `example-template-file` and specifying template parameters `param1` and `param2`.

```
> cfn-create-stack example-stack --template-file example-template-file --parameters "param1=foo;param2=bar"
```

```
arn:aws:aws21:us-east-1:123456789:stack/aaf549a0-a413-11df-adb3-5081b3858e83/example-stack
```


cfn-delete-stack

Description

Delete an existing stack

Syntax

`cfn-delete-stack` *StackName* `common-options` (p. 427)

Options

Name	Description	Required
<i>StackName</i>	The name of the stack you want to delete. You can also set this value using <code>--stack-name</code> . Type: String Default: None	Yes
<code>--force</code>	Delete the stack without a confirmation prompt. Type: String Default: <code>false</code> Valid value: <code>true</code> <code>false</code>	No

Output

The command returns no output. Use `cfn-describe-stacks` to discover the stack delete status.

AWS CloudFormation displays errors on `stderr`.

Examples

Example Request

This example deletes a stack named `example-stack`.

```
PROMPT> cfn-delete-stack example-stack  
  
Warning: Deleting a stack will lead to deallocation of all of the stack's  
resources. Are you sure you want to delete this stack?  
[Ny] y
```

Related Operations

- [cfn-describe-stacks](#) (p. 436)
- [cfn-describe-stack-events](#) (p. 439)

- [cfn-list-stacks \(p. 447\)](#)

cfn-describe-stacks

Describe one or more running stacks.

Note

cfn-describe-stacks will only list stacks that are running, or are in the process of being created or deleted. If you want to list stacks that have already been deleted, use **cfn-list-stacks**.

Syntax

```
cfn-describe-stacks [options]
```

Options

stackname

The name of the stack you'd like information about. If this option isn't specified, **cfn-describe-stacks** will list all stacks for the account.

--aws-credential-file *VALUE*

Location of the file with your AWS credentials. This value can be set automatically by using the environment variable 'AWS_CREDENTIAL_FILE'.

--connection-timeout *VALUE*

Specify a connection timeout *VALUE* (in seconds). The default value is '30'.

--delimiter *VALUE*

Specify the delimiter to use when displaying delimited (long) results.

--headers

If you are displaying tabular or delimited results, it includes the column headers. If you are showing xml results, it returns the HTTP headers from the service request, if applicable. This setting is off by default.

-I, --access-key-id *VALUE*

Specify *VALUE* as the AWS Access ID to use.

-K, --ec2-private-key-file-path *VALUE*

The private key file path. This value can be set automatically by using the environment variable 'EC2_PRIVATE_KEY'.

--region *VALUE*

Specify region *VALUE* as the web service region to use. This value can be set by using the environment variable 'EC2_REGION'.

-S, --secret-key *VALUE*

Specify *VALUE* as the AWS Secret Key to use.

--show-empty-fields

Show empty fields and rows, using a "(nil)" value. The default is to suppress empty fields or columns.

--show-request

Displays the URL the tools used to call the AWS Service. The default value is 'false'.

--show-table, --show-long, --show-xml, --quiet

Specify how the results are displayed: tabular, delimited (long), xml, or no output (quiet). Tabular shows a subset of the data in fixed column-width form, while long shows all of the returned values delimited by a character. The xml is the raw return from the service, while quiet suppresses all standard output. The default is tabular, or 'show-table'.

-U, --url *VALUE*

This option will override the URL for the service call with *VALUE*. This value can be set by using the environment variable 'AWS_CLOUDFORMATION_URL'.

Output

The command returns a table with the following columns:

NAME

Identifies the entry as a stack

STACK_ID

Unique identifier for the stack. This column appears only in the `--show-long` view.

STATUS

The current status of the stack.

One of: `CREATE_IN_PROGRESS` | `CREATE_FAILED` | `CREATE_COMPLETE` | `DELETE_IN_PROGRESS` | `DELETE_FAILED` | `DELETE_COMPLETE`.

STATUS_REASON

Status reason. This column appears only in the `--show-long` view.

DESCRIPTION

Description from template used to create stack.

PARAMETERS

Parameters provided during stack creation. This column appears only in the `--show-long` view.

OUTPUTS

Outputs returned from stack creation.

CREATED_TIME

Time when the stack was created.

LAST_UPDATED_TIME

Time when the stack was last updated.

DISABLE_ROLLBACK

Disable rollback of created resources if the stack creation fails. Normally, when a stack fails, all its resources are deleted. This column indicates whether a resource will not be deleted if the stack fails. This column appears only in the `--show-long` view.

TIMEOUT_IN_MINUTES

Stack creation timeout. This column appears only in the `--show-long` view.

NOTIFICATION_ARNS

SNS ARNs to receive notification about the stack. This column appears only in the `--show-long` view.

TAGS

A set of user-defined Tags associated with this stack. This column appears only in the `--show-long` or `--show-xml` views.

Examples

List All Running Stacks

To list all running stacks, simply type `cfn-list-stacks` with no arguments:

```
$ cfn-describe-stacks

STACK myGollumWiki          CREATE_COMPLETE    AWS CloudFormation Sample Template
Gol... you create a stack from this template. WebsiteURL=http://myurl.amazon
aws.com 2012-07-07T18:11:58Z
STACK myMultiAzWordPress  CREATE_IN_PROGRESS AWS CloudFormation Sample Template
```

```
Wor... you create a stack from this template.  
2012-07-07T18:19:36Z
```

List Information About a Particular Running Stack

By supplying the stack ID to `cfn-list-stacks`, you can get information specific to that stack:

```
$ cfn-describe-stacks myGollumWiki  
  
STACK myGollumWiki          CREATE_COMPLETE      AWS CloudFormation Sample Template  
Gol... you create a stack from this template. WebsiteURL=http://myurl.amazon  
aws.com 2012-07-07T18:11:58Z
```

Get a CSV File Suitable for Importing to a Spreadsheet

By supplying the `--headers` and `--show-long` arguments, you can create output suitable for importing to a spreadsheet:

```
$ cfn-describe-stacks --headers --show-long >output.csv
```

The resulting file, `output.csv`, will contain a comma-separated-value listing of the output columns and corresponding data for all running stacks. For example:

	A	B	C	D	E	F	G	
STACK	NAME	STACK_ID	STATUS	STATUS_REASON	DESCRIPTION	PARAMETERS		OU
STACK	myGollumWiki	arn:aws:cloudformation	CREATE_COMPLETE	(nil)	AWS CloudFormation	InstanceType=m1.small		W
STACK	myMultiAzWordPress	arn:aws:cloudformation	CREATE_COMPLETE	(nil)	AWS CloudFormation	DBPassword=*****;WebServ		W

Related Operations

- [cfn-create-stack](#) (p. 431)
- [cfn-describe-stack-events](#) (p. 439)
- [cfn-describe-stack-resources](#) (p. 443)
- [cfn-delete-stack](#) (p. 434)
- [cfn-list-stacks](#) (p. 447)

cfn-describe-stack-events

Description

Describe the events for one or more stacks.

Syntax

`cfn-describe-stack-events` *StackName* *common-options* (p. 427)

Options

Name	Description	Required
<i>StackName</i>	The name of the stack you want to describe. You can also set this value using <code>--stack-name</code> . Type: String Default: None	Yes

Output

The command returns a table that contains the following information:

- `EVENT_ID`
Unique identifier for the event.
- `STACK_NAME`
The name of the stack the event correspond to
- `STACK_ID`
The identifier of the stack the event correspond to.
- `LOGICAL_ID`
Logical identifier of the resource.
- `PHYSICAL_ID`
Physical identifier for the resource.
- `RESOURCE_PROPERTIES`
Properties of the resources.
- `RESOURCE_TYPE`
AWS type of the resource.
- `EVENT_TIME`
Time when the event occurred.
- `RESOURCE_STATUS`
The status of the resource associated with the event.

- RESOURCE_STATUS_REASON

More information about the status of the resource associated with the event.

AWS CloudFormation displays errors on stderr.

Examples

Example Request

This example returns the event information for the stack named MyExampleStack

```
PROMPT> cfn-describe-stack-events MyExampleStack

STACK_EVENT      EVENT_ID      STACK_NAME      STACK_ID      LOGICAL_ID
PHYSICAL_ID
EVENT_TIME      RESOURCE_STATUS
STACK_EVENT      7163741d-e920-4dac-b4a4-a0ac0e35a20a      2      f9501d75-5402-
4bf6-b5d8-84e838feb5f5      myEC2SGrpOne      2-myEC2SGrpOne-496118474
{"GroupDescription":"instance access for load balancer"}      AWS::SecurityGroup
2010-06-22T22:05:27Z      CREATE_IN_PROGRESS
```

Related Operations

- [cfn-create-stack](#) (p. 431)
- [cfn-describe-stack-resources](#) (p. 443)
- [cfn-delete-stack](#) (p. 434)

cfn-describe-stack-resource

Description

Returns the description for the specified resource in the specified stack.

Note

The `cfn-describe-stack-resource` command returns information about deleted stacks for 90 days after they have been deleted.

Syntax

`cfn-describe-stack-resource` *StackName* `common-options` (p. 427)

Options

Name	Description	Required
<i>StackName</i>	The name of the stack containing the resource whose description you want to view. You can also set this value using <code>-s</code> or <code>--stack-name</code> . Type: String Default: None	Yes
<i>LogicalResourceId</i>	The logical resource ID for the resource whose description you want to view. You can also set this value using <code>-l</code> or <code>--logical-resource-id</code> . Type: String Default: None	Yes

Output

The command returns a table that contains the following information:

- LOGICAL_ID
Logical identifier for the resource.
- PHYSICAL_ID
Physical identifier for the resource.
- TYPE
Type of the resource.
- LAST_UPDATED_TIMESTAMP
Time when the resource's status was last updated.

- STATUS

The current status of the resource.

- STATUS_REASON

More information about the resource status. To display this value, you must specify `--show-long`.

- METADATA

The JSON format content of the `Metadata` attribute declared for the resource. To display this value, you must specify `--show-long` or `--show-xml`. For more information, see [Metadata \(p. 404\)](#).

AWS CloudFormation displays errors on `stderr`.

Examples

Example Request

This example returns the `example-lb1` resource in the `example-1` stack.

```
PROMPT> cfn-describe-stack-resource example-1 example-lb1
```

STACK_RESOURCE	LOGICAL_ID	PHYSICAL_ID	TYPE
	LAST_UPDATED_TIMESTAMP	STATUS	
STACK_RESOURCE	example-lb1	stack-1-example-lb1-2052137016	
AWS::LoadBalancer		2011-07-11T15:39:56Z	CREATE_COMPLETE

Related Operations

- [cfn-create-stack \(p. 431\)](#)
- [cfn-describe-stack-events \(p. 439\)](#)
- [cfn-list-stack-resources \(p. 445\)](#)

cfn-describe-stack-resources

Description

Describe one or more member resources for one, or all of your running stacks.

If you do not provide either a stack or resource id, information for all running stacks and resources will be returned, up to a limit of 100 records.

Note

To list more than 100 resources use [cfn-list-stack-resources](#) (p. 445) instead.

Syntax

`cfn-describe-stack-resources` *StackName* *common-options* (p. 427)

Options

Name	Description	Required
<code>-l</code> , <code>--logical-resource-id</code> VALUE	The logical resource ID for a particular resource to describe. If you do not specify either a logical or physical resource ID, then all resources will be returned. Type: String Default: None	No
<code>-p</code> , <code>--physical-resource-id</code> VALUE	The physical resource ID for a particular resource to describe. If you do not specify either a logical or physical resource ID, then all resources will be returned. Type: String Default: None	No
<code>-s</code> , <code>--stack-name</code>	The name of the stack whose resources you want to describe. If you do not specify a stack, then resources for all of your running stacks and up to 90 days of your deleted stacks will be returned, up to a total of 100 resources. Type: String Default: None	No

Output

The command returns a table that contains the following information:

- LOGICAL_ID

Logical identifier for the resource

- **PHYSICAL_ID**
Physical identifier for the resource
- **TYPE**
Type of the resource
- **CREATED_TIME**
Time when the resource's status changed to `CREATE_COMPLETE`
- **STATUS**
The current status of the resource.
- **STATUS_REASON**
More information about the resource status.

AWS CloudFormation displays errors on stderr.

Examples

Example Request

This example describes the resources in the example-1 stack.

```
PROMPT> cfn-describe-stack-resources example-1
```

STACK_RESOURCE	LOGICAL_ID	PHYSICAL_ID	TYPE
	CREATED_TIME	STATUS	
STACK_RESOURCE	example-lb1	stack-1-example-lb1-2052137016	
AWS::LoadBalancer		2009-04-15:39:56Z	CREATE_COMPLETE
STACK_RESOURCE	example-lc1	stack-1-example-lc1-2052137016	
AWS::LaunchConfiguration		2009-04-16:45:00Z	CREATE_COMPLETE

Related Operations

- [cfn-create-stack](#) (p. 431)
- [cfn-describe-stack-events](#) (p. 439)
- [cfn-describe-stack-resources](#) (p. 443)

cfn-list-stack-resources

Description

Returns descriptions for all resources of the specified stack.

Note

The `cfn-list-stack-resources` command returns information about deleted stacks for 90 days after they have been deleted.

Syntax

`cfn-list-stack-resources` *StackName* *common-options* (p. 427)

Options

Name	Description	Required
<i>StackName</i>	The name of the stack. Alternatively, you can specify the stack ID. You can also set this value using <code>-s</code> or <code>--stack-name</code> . Type: String Default: None	Yes

Output

The command returns a table that contains the following information:

- LOGICAL_ID
The logical name of the resource specified in the template.
- PHYSICAL_ID
The name or unique identifier that corresponds to the physical instance ID of the resource.
- TYPE
Type of the resource.
- LAST_UPDATED_TIMESTAMP
Time when the resource's status was last updated.
- STATUS
The current status of the resource.
- STATUS_REASON
More information about the resource status. To display this value, you must specify `--show-long` or `--show-xml`.

AWS CloudFormation displays errors on stderr.

Examples

Example Request

This example lists the resources in the example-1 stack.

```
PROMPT> cfn-list-stack-resources example-1
```

STACK_RESOURCE	LOGICAL_ID	PHYSICAL_ID	TYPE
		LAST_UPDATED_TIMESTAMP	STATUS
STACK_RESOURCE	example-lb1	stack-1-example-lb1-2052137016	
AWS::LoadBalancer		2011-07-11T15:39:56Z	CREATE_COMPLETE
STACK_RESOURCE	example-lc1	stack-1-example-lc1-2052137016	
AWS::LaunchConfiguration		2011-07-11T15:45:00Z	CREATE_COMPLETE

Related Operations

- [cfn-create-stack](#) (p. 431)
- [cfn-describe-stack-events](#) (p. 439)
- [cfn-describe-stack-resource](#) (p. 441)

cfn-list-stacks

Description

List one or more running or deleted stacks filtered by status.

Note

The `cfn-list-stacks` command returns information about deleted stacks for 90 days after they have been deleted.

Syntax

`cfn-list-stacks` *stack-status* *common-options* (p. 427)

Options

stack-status

Filters for the ending status on the deleted stacks you want to list. If you do not specify this value, AWS CloudFormation only returns information stacks that ended with the `DELETE_COMPLETE` status. You can specify multiple status values for `--stack-status` if you separate them by a comma.

Required: No. The default value is `DELETE_COMPLETE`.

Type: String.

Valid Values: `CREATE_COMPLETE | CREATE_FAILED | CREATE_IN_PROGRESS | DELETE_COMPLETE | DELETE_FAILED | DELETE_IN_PROGRESS | ROLLBACK_COMPLETE | ROLLBACK_FAILED | ROLLBACK_IN_PROGRESS | UPDATE_COMPLETE | UPDATE_COMPLETE_CLEANUP_IN_PROGRESS | UPDATE_FAILED | UPDATE_IN_PROGRESS | UPDATE_ROLLBACK_COMPLETE_CLEANUP_IN_PROGRESS | UPDATE_ROLLBACK_IN_PROGRESS`

Output

The command returns a table that contains the following information:

- `STACK_ID`

Unique identifier for the stack.

- `NAME`

The stack name.

- `CREATED_TIME`

Time when the stack was created.

- `STATUS`

The status of the stack when it was deleted.

One of `CREATE_IN_PROGRESS | CREATE_COMPLETE | CREATE_FAILED | DELETE_IN_PROGRESS | DELETE_COMPLETE | DELETE_FAILED | ROLLBACK_IN_PROGRESS | ROLLBACK_COMPLETE | ROLLBACK_FAILED`.

- `TEMPLATE_DESCRIPTION`

Description of the template used to create the stack.

AWS CloudFormation displays errors on stderr.

Examples

Example Request

This example returns information about stacks that have the `CREATE_COMPLETE` status, and stacks which were deleted (within the past 90 days) with the status `DELETE_COMPLETE`.

```
PROMPT> cfn-list-stacks --stack-status CREATE_COMPLETE,DELETE_COMPLETE
STACK  STACK_ID
NAME      CREATION_TIME          STATUS      TEMPLATE_DESCRIPTION
STACK  arn:aws:cloudformation:us-east-1:123456789012:stack/mut2/83327aa0-863
mut2      2011-05-24T19:53:36Z  CREATE_COMPLETE  TestTemplate556
STACK  arn:aws:cloudformation:us-east-1:897345613465:stack/mut4/45627ax0-980
mut2      2011-05-24T19:53:36Z  DELETE_COMPLETE  TestTemplate559
```

Related Operations

- [cfn-describe-stacks](#) (p. 436)
- [cfn-delete-stack](#) (p. 434)

cfn-update-stack

Description

Update an existing stack from a template stored in a local file or in an Amazon S3 bucket. If any resource defined in the updated template cannot be updated, the stack will be rolled back to the stack configuration of the previous template.

Note

You cannot update [AWS::S3::Bucket](#) (p. 354) resources, for example, to add or modify tags.

For detailed information about creating an update template, updating a stack, and monitoring its progress, see [Updating AWS CloudFormation Stacks](#) (p. 32).

Syntax

`cfn-update-stack` *StackName* `common-options` (p. 427)

Options

Name	Description	Required
<i>StackName</i>	Name or stack ID of the stack to update. A stack name must contain only alphanumeric characters and must start with an alphabetic character. The maximum length of the name is 255 characters. Stack names are case sensitive. You can also set this value using "--stack-name". Type: String Default: None Example: webserv	Yes
--template-file <i>VALUE</i>	Path to the file that contains the template with the updated stack information. An uploaded template can be, at most, 51200 bytes. Type: String Default: None	No
-u, --template-url <i>VALUE</i>	Path of the URL that contains the template with the updated stack information. The URL must point to a template (max size: 307,200 bytes) in an Amazon S3 bucket that you have read permissions to, located in the same region as the stack. The URL itself can be, at most, 1024 characters long. Type: String Default: None	No

Name	Description	Required
<code>-p, --parameters</code> <code>"key1=value1;</code> <code>key2=value2 ..."</code>	Parameter values used to update the stack. Type: String Default: None	No
<code>-c, --capabilities</code> <code>VALUE</code>	The list of capabilities that you want to allow in the stack. If your stack contains IAM resources, you must specify the CAPABILITY_IAM value for this parameter; otherwise, this action returns an InsufficientCapabilities error. IAM resources are the following: AWS::IAM::AccessKey (p. 322), AWS::IAM::Group (p. 324), AWS::IAM::Policy (p. 327), UserToGroupAddition (p. 335), and AWS::IAM::User (p. 334). For more information about using IAM resources in templates, see Controlling User Access with AWS Identity and Access Management (p. 196). Type: String Valid Values: CAPABILITY_IAM Default: None	No

Output

This command returns a table that contains the following:

- `STACK_ID`
 Unique Identifier for the stack

AWS CloudFormation displays errors on stderr.

Examples

Example Request

Update a Stack named `example-stack` using template located in file `example-template-file` and specifying template parameters `param1` and `param2`.

```
> cfn-update-stack example-stack --template-file example-template-file --parameters "param1=foo;param2=bar"

arn:aws:aws21:us-east-1:123456789:stack/aaf549a0-a413-11df-adb3-5081b3858e83/example-stack
```

cfn-get-template

Description

Get the template used to create a running or deleted stack.

This command will return the text of the template used to create a stack.

Note

The `cfn-get-template` command returns template information from a deleted stack for 90 days after the stack has been deleted.

Syntax

`cfn-get-template` *StackName* *common-options* (p. 427)

Options

Name	Description	Required
<i>StackName</i>	The name of the stack whose template you want to get. You can also set this value using <code>--stack-name</code> . Type: String Default: None	No

Output

The command returns the template body, enclosed in double quotes.

AWS CloudFormation displays errors on `stderr`.

Examples

Example Request

This example gets the template used with the `example-template` stack.

```
PROMPT> cfn-get-template example-template

"
  {
    "AWSTemplateFormatVersion" : "2010-04-01",
    "Resources" : {
      "myEC2SGrpOne" : {
        "Type" : "AWS::SecurityGroup", "Version" : "2009-11-30", "Properties" :
        {
          "GroupDescription" : "foo"
        }
      }
    }
  }
}
```

```
}  
"
```

Related Operations

- [cfn-create-stack](#) (p. 431)

cfn-validate-template

Description

Do a static evaluation of a template.

Note

This command checks the syntactic correctness of the template. It does not do a deep check of resources you have declared. For example, if you have specified an invalid region name, `cfn-validate-template` will not detect that. Declaration errors of that type can be discovered only creating a stack with the template.

Syntax

`cfn-validate-template` `{-f VALUE | -u VALUE}` [common-options](#) (p. 427)

Options

Name	Description	Required
<code>-f, --template-file</code>	The local path and file name to the template to validate Type: String Default: None One of <code>-f</code> or <code>-u</code> must be specified, but not both.	Conditional
<code>-u, --template-url</code>	The URL of the template to validate Type: String Default: None One of <code>-u</code> or <code>-f</code> must be specified, but not both.	Conditional

Output

If the template is valid, the command returns information about capabilities and parameters defined in the template.

If the template contains capabilities (currently, only IAM capabilities are detected), it returns the following capability information:

```
CAPABILITIES_REASON REASON
CAPABILITIES_REASON Template contains IAM resources
CAPABILITIES CAPABILITY_NAME
CAPABILITIES CAPABILITY_IAM
```

If the template contains IAM resource and you use that template with the [cfn-create-stack](#) (p. 431) or [cfn-update-stack](#) (p. 449) commands, you must specify the `CAPABILITY_IAM` value for the `--capabilities` parameter; otherwise, this command returns an `InsufficientCapabilities` error.

If the template contains parameters, the command returns a table that contains the following parameter information. (If a valid template has no parameters, no output is returned.)

- **PARAMETER_NAME**

Parameter name

- **DEFAULT_VALUE**

If the parameter has a default value, that value is reported.

- **NOECHO**

True if the parameter is declared with the `NOECHO` property.

- **DESCRIPTION**

Value of the Description property for the parameter.

AWS CloudFormation displays errors on `stderr`.

Examples

Example Request

This reports the validity for the local file `example-template-file.template`.

```
PROMPT> cfn-validate-template --template-file example-template-file.template

PARAMETERS  PARAMETER_NAME  DEFAULT_VALUE  NOECHO
PARAMETERS  WordPressUser   admin          false
PARAMETERS  WordPressDBName wordpressdb     false
PARAMETERS  WordPressPwd    password       true
PARAMETERS  AvailabilityZones us-east-1a,us-east-1b false
PARAMETERS  GroupSize       2              false
PARAMETERS  InstanceType    m1.small       false
```

Related Operations

- [cfn-get-template \(p. 451\)](#)