include::attributes.txt[]

// Attributes

[.topic] [#ref-cli-cmd-synth] = cdk synthesize :info\_titleabbrev: cdk synth :keywords: {aws} CDK, {aws} CDK CLI, CDK Toolkit, IaC, Infrastructure as code, {aws} Cloud, {aws} CloudFormation, cdk synthesize, cdk synth

== [abstract]

## Synthesize a CDK app to produce a cloud assembly, including an {aws} CloudFormation template for each stack.

// Content start

Synthesize a CDK app to produce a cloud assembly, including an {aws} CloudFormation template for each stack.

Cloud assemblies are files that include everything needed to deploy your app to your {aws} environment. For example, it includes a CloudFormation template for each stack in your app, and a copy of the file assets or Docker images that you reference in your app.

If your app contains a single stack or if a single stack is provided as an argument, the CloudFormation template will also be displayed in the standard output (stdout) in YAML format.

If your app contains multiple stacks, cdk synth will synthesize the cloud assembly to cdk.out.

[#ref-cli-cmd-synth-usage] == Usage

== [source,none,subs=“verbatim,attributes”]

$ cdk synthesize ++++++++++++—-++++++++++++

[#ref-cli-cmd-synth-args] == Arguments

[#ref-cli-cmd-synth-args-stack-name] *CDK stack ID*:: The construct ID of the CDK stack from your app to synthesize. + *Type*: String + *Required*: No

[#ref-cli-cmd-synth-options] == Options

For a list of global options that work with all CDK CLI commands, see xref:ref-cli-cmd-options[Global options].

[#ref-cli-cmd-synth-options-exclusively] --exclusively, -e <BOOLEAN>:: Only synthesize requested stacks, don’t include dependencies.

[#ref-cli-cmd-synth-options-help] --help, -h <BOOLEAN>:: Show command reference information for the cdk synthesize command.

[#ref-cli-cmd-synth-options-quiet] --quiet, -q <BOOLEAN>:: Do not output the CloudFormation template to stdout. + This option can be configured in the CDK project’s cdk.json file. The following is an example: + [source,json,subs=“verbatim,attributes”] — { “quiet”: true } — + *Default value*: false

[#ref-cli-cmd-synth-options-validation] --validation <BOOLEAN>:: Validate the generated CloudFormation templates after synthesis by performing additional checks. + You can also configure this option through the validateOnSynth attribute or CDK\_VALIDATION environment variable. + *Default value*: true

[#ref-cli-cmd-synth-examples] == Examples

[#ref-cli-cmd-synth-examples-1] === Synthesize the cloud assembly for a CDK stack with logial ID MyStackName and output the CloudFormation template to stdout

== [source,none,subs=“verbatim,attributes”]

## $ cdk synth MyStackName

[#ref-cli-cmd-synth-examples-2] === Synthesize the cloud assembly for all stacks in a CDK app and save them into cdk.out

== [source,none,subs=“verbatim,attributes”]

## $ cdk synth

[#ref-cli-cmd-synth-examples-3] === Synthesize the cloud assembly for MyStackName, but don’t include dependencies

== [source,none,subs=“verbatim,attributes”]

## $ cdk synth MyStackName –exclusively

[#ref-cli-cmd-synth-examples-4] === Synthesize the cloud assembly for MyStackName, but don’t output the CloudFormation template to stdout

== [source,none,subs=“verbatim,attributes”]

## $ cdk synth MyStackName –quiet