include::attributes.txt[]

// Attributes [.topic] [#develop] = Develop {aws} CDK applications :keywords: {aws} CDK, IaC, Infrastructure as code, {aws}, {aws} Cloud, serverless, modern applications

== [abstract]

## Manage your infrastructure on {aws} by developing applications using the {aws} Cloud Development Kit ({aws} CDK).

// Content start

Manage your infrastructure on {aws} by developing applications using the {aws} Cloud Development Kit ({aws} CDK).

[#develop-prerequisites] == Prerequisites

Before you can start developing applications, complete all set up steps in xref:getting-started[Getting started with the {aws} CDK].

[#develop-overview] == Developing {aws} CDK applications overview

At a high-level, developing CDK applications involves the following steps:

. *Create a CDK project* – A CDK xref:projects[project] consists of the files and folders that store and organize your CDK code. . *Create a CDK app* – Within a CDK project, you use the App construct to define a CDK xref:apps[application]. . *Create a CDK stack* – Within the scope of your CDK app, you define one or more CDK xref:stacks[stacks]. . *Define your infrastructure* – Within the scope of a CDK stack, you use xref:constructs[constructs] from the {aws} Construct Library to define the {aws} resources and properties that will become your infrastructure. Using a general-purpose programming xref:languages[language] of your choice, you can use logic, such as conditional statements and loops, to define your infrastructure based on certain conditions.

[#develop-gs] == Get started with developing CDK applications

To get started, you can use the {aws} CDK Command Line Interface ({aws} CDK CLI) cdk init command. Provide the --language option to specify the programming language to use. This command creates a starting CDK project and imports the main {aws} Construct Library and core modules.

[#develop-library] == Import and use the {aws} CDK Library

After you create a CDK project, import and use constructs from the {aws} CDK Library to begin defining your infrastructure. For instructions, see xref:work-with[Work with the {aws} CDK library].

[#develop-next] == Next steps

When ready to deploy your application, use the CDK CLI cdk deploy command. For instructions, see xref:deploy[Deploy {aws} CDK applications].

include::usage-data.adoc[leveloffset=+1]

include::cfn-layer.adoc[leveloffset=+1]

include::get-env-var.adoc[leveloffset=+1]

include::get-cfn-val.adoc[leveloffset=+1]

include::use-cfn-template.adoc[leveloffset=+1]

include::get-ssm-val.adoc[leveloffset=+1]

include::get-sm-val.adoc[leveloffset=+1]

include::set-cw-alarm.adoc[leveloffset=+1]

include::get-context-var.adoc[leveloffset=+1]

include::use-cfn-public-registry.adoc[leveloffset=+1]

include::define-iam-l2.adoc[leveloffset=+1]