












 kalaier /
awesome-cdk

 |     

 Code  Issues 1  Pull requests 7  Actions  Projects  Security  Insights



A collection of awesome things related to the AWS Cloud Development Kit (CDK)

 CC0-1.0 license

 Code of conduct


 1.8k stars  186 forks  65 watching  Activity


 Public repository

 main ▾



 Branches  Tags

 kalaier Merge pull request #95 from hupe1980/cdk-threagile ...

✓ on Oct 3, 2022  119

[View code](#)

Awesome CDK

Curated list of awesome [AWS Cloud Development Kit](#) (AWS CDK) open-source projects, guides, blogs and other resources.



The AWS Cloud Development Kit (AWS CDK) is an open-source software development framework for defining cloud infrastructure in code.

Contents

- [Construct Libraries](#)
 - [APIs](#)
 - [Databases](#)
 - [Static Websites](#)

- [Security](#)
- [Ops](#)
- [Queue](#)
- [CI/CD](#)
- [Monitoring](#)
- [Workflows](#)
- [Multi-accounts setup](#)
- [High-Level Frameworks](#)
- [Scaffolding](#)
- [Language Support](#)
- [Library Publishing](#)
- [Tools](#)
- [Training Materials and Sample Code](#)
- [Blog Posts & Talks](#)
- [Related Projects](#)
- [Tips & Tricks](#)

Construct Libraries [↗](#)

This section includes code libraries in various programming languages which vend constructs that can be used in CDK apps.

APIs [↗](#)

- [cdk-chalice](#) - AWS CDK construct for AWS Chalice (Python Serverless Microframework for AWS).
- [auto-cdk](#) - Automatically generate api-gateway/lambda integrations with the filesystem (beta).
- [crow-api](#) - Create a serverless API with routes based on your file structure.

Databases [↗](#)

- [aws-cdk-dynamodb-seeder](#) - A simple CDK seeder for DynamoDB.
- [cdk-tweet-sentiment](#) - Identify sentiments in tweets and log them into an Amazon DynamoDB table.
- [cdk-dynamo-table-viewer](#) - Exposes the contents of an Amazon DynamoDB table through a public HTML page.
- [cdk-postgresql](#) - AWS CDK Constructs for PostgreSQL.

- [cdk-sqlserver-seeder](#) - CDK construct that executes custom SQL scripts against SQL Server database.

Static Websites [↗](#)

- [cdk-static-website](#) - CDK component that creates a static website using S3, configures CloudFront (CDN) and maps a custom domain via Route53 (DNS).
- [ness](#) - CDK powered CLI tool for deploying static sites to your AWS account.

Security [↗](#)

- [cdk-passwordless](#) - Construct for having passwordless authentication using userpool.
- [cdk-iam-generator](#) - Construct to generate IAM Managed Policies and IAM Roles using JSON Configuration.
- [c3](#) - Enables compliancy with privacy and security best practices.
- [cdk-iam-floyd](#) - IAM policy statement generator with fluent interface.
- [k9-cdk](#) - Construct to generate secure S3 bucket policies easily.
- [cdk-cloudfront-authorization](#) - CloudFront with Cognito authentication using Lambda@Edge.
- [aws-firewall-factory](#) - Deploy, update, and stage your WAFs while managing them centrally via FMS.

Ops [↗](#)

- [cdk-instanceStopRule](#) - CDK component which creates an instance with a CloudWatch rule to stop it at the end of the day.
- [cdk-time-bomb](#) - CDK Construct that implodes your AWS CDK Stack after a set amount of time.

Queue [↗](#)

- [cdk-tweet-queue](#) - Fills up an SQS queue with tweets from a tweeter search query.
- [cdk-ses-template-mailer](#) - Constructs to create AWS SES email templates + microservice to send templated emails with AWS SES.
- [cdk-sqs-monitored](#) - SQS Construct with dead letter queue and configured alarms.

CI/CD [↗](#)

- [aws-delivlib](#) - Synthesizes CI/CD pipelines for multi-language software delivery (used by the CDK itself).

- [cdk-blue-green-container-deployment](#) - Blue/Green container deployment with CodeDeploy.

Monitoring

- [cdk-watchful](#) - Automatic dashboards and alarms for CDK apps.
- [aws-cdk-billing-alarm](#) - Construct that sets up email alerts for exceeding an amount on your AWS bill.
- [cdk-monitoring-constructs](#) - Use high-level APIs to create monitoring for your AWS apps. Generates dashboards automatically.

Workflows

- [cdk-pull-request-check](#) - CDK component that automatically check pull requests.
- [cdk-github-webhook](#) - CDK component that provisions GitHub webhooks.
- [cdk-codepipeline-slack](#) - CDK component that provisions a #slack approval workflow.
- [cdk-codecommit-backup](#) - Backup CodeCommit repositories to S3.

 [readme.md](#)

action.

- [cdk-developer-tools-notifications](#) - Slack / Microsoft Teams / Email notifications for developer tools: CodeCommit, CodeBuild, CodeDeploy, CodePipeline.
- [aws-pdf-textract-pipeline](#) - ETL pipeline for crawling PDFs from the Web using Puppeteer and transforming their contents into structured data using AWS Textract and storing the results in DynamoDB.

Multi-accounts setup

- [aws-bootstrap-kit](#) - Creates a multi-account set-up with AWS Organization, AWS SSO, DNS, and AWS CodePipeline.
- [cdk-organizations](#) - CDK constructs that helps to provision AWS Organization, Organizational Units (OU), Accounts and Policies.

High-Level Frameworks

- [punchcard](#) - TypeScript framework to unify infrastructure and runtime code for the CDK, so you can declare constructs and implement runtime logic within the context of one Node.js application.
- [aws-cdk-pure](#) - A toolkit to develop purely functional and high-order cloud components with AWS CDK.

- [cdk-stepfunctions-patterns](#) - A set of Step Functions high-level resiliency patterns.
- [Orkestra](#) - An event-driven alternative to Airflow built on the AWS CDK and Step Functions.
- [SST](#) - An open source framework for building serverless applications with CDK. It features a Live Lambda Development environment, to test and debug Lambda functions locally without having to redeploy them.
- [Datajob](#) - Build and deploy a serverless data pipeline or machine learning pipeline on AWS with no effort.

Scaffolding [↗](#)

- [ReactJS + Cognito + CDK Starter](#) - Starter project for ReactJS + Amazon Cognito + Amazon Amplify Framework with AWS CDK support.
- [cra-template-aws-cdk](#) - Create React App template using AWS CDK for out of the box, simple provisioning of serverless React apps.
- [create-cdk-app](#) - Create CDK apps from templates.
- [awscdk-jsii-template](#) - A GitHub template repository to generate a ready environment to build, test and publish your JSII construct lib for AWS CDK.

Language Support [↗](#)

- [AWS-CDK-Kotlin-DSL](#) - A Wrapper library of [AWS CDK Java](#). CI automatically generates code and deploys it by daily.
- [aws-cdk-maven-plugin](#) - A plugin to define and deploy your AWS CDK applications using Java and Maven.
- [aws-lambda-nodejs-webpack](#) - Alternative Node.js lambda CDK construct, using [webpack](#).
- [aws-lambda-nodejs-esbuild](#) - Alternative Node.js lambda CDK construct, using [esbuild](#).

Library Publishing [↗](#)

- [GitHub Action](#) - GitHub Action for AWS CDK.
- [jsii-publish](#) - A [Docker image](#) and [GitHub action](#) to build and publish CDK constructs created via [JSII](#).

Tools [↗](#)

- [CDK-Dia](#) - Automatic infrastructure diagrams for AWS CDK.

Training Materials and Sample Code

- [Official CDK Examples](#) - A set of example projects for the AWS CDK.
- [CDK Serverless Workshop](#) - A workshop that guides you through the process of creating and deploying CDK application.
- [Build an App with AWS Cloud Development Kit course on egghead.io](#)
- [Infrastructure is Code with the AWS CDK](#) - Recording of re:Invent 2018 session.
- [GitHub Changelog Crawler](#) - A fully fledged CDK app written by Nathan Peck which uses Fargate, API Gateway, Lambda, CloudFront, S3, ElastiCache, and DynamoDB.
- [ECS with CI/CD](#) - Demo of deploying ECS application using CDK.
- [Example templates for aws cdk](#) - Working TypeScript snippets from several AWS projects.
- [Lambda packaging asset](#) - CDK asset which builds lambda function and produces a ZIP file with dependencies.
- [Open CDK Guide](#) - Open source guide on CDK and best practices.
- [Colorteller Example](#) - Great example project using Fargate and Appmesh.
- [CDK Patterns](#) - An opensource collection of serverless architecture patterns built with CDK.
- [Create a CI/CD pipeline using CodePipeline and CodeBuild](#) - The [cra-pipeline](#) project on GitHub shows an AWS CodePipeline with AWS CodeBuild to deploy a static React application.
- [React SPA with server-side rendering on AWS Lambda](#) - The [cra-serverless](#) project is a serverless architecture to add pre-rendering to a React website created with [create-react-app](#).
- [Mini Tutorial: Setup AWS Lambda + ACM + API Gateway with AWS Cloud Development Kit](#) - Deploy a functional public API that receives an HTML form (e.g. /contact_us.html) POST request and delivers its data to Pushover notification service.
- [Example of REST API built with CDK](#) - Source code that powers REST APIs at <https://api.l3x.in/>.
- [dilbert-feed](#) - A serverless application written in Go that allows you to enjoy Dilbert in your RSS feed reader without any ads.
- [django-postgres-vue-gitlab-ecs](#) - An example Django + Vue.js web app deployed with CDK using GitLab CI.
- [nextjs-vercel-aws-cdk-example](#) - A PostgreSQL (RDS), EventBridge (crons) and SNS (background jobs) example along with a Next.js application.
- [Create and Publish CDK Constructs Using projen and jsii](#) - A step-by-step guide with sample code to create a new CDK construct using [projen](#) and [jsii](#) and publish it to npm, Maven Central, PyPi and NuGet.

Blog Posts & Talks

- [Introduction to how and why CDK](#) - By Leo Lapworth.
- [How to Build a CDK Construct Library](#) - By Philipp Garbe.
- [CDK All The Things: A Whirlwind Tour](#) - By Kevin S Lin.
- [AWS CDK Developer Preview Announcement](#) - The first AWS CDK Developer Preview announced on 27 August 2018.
- [Contributing to the AWS Cloud Development Kit](#) - By Mike Cowgill from Intuit.
- [First look into AWS Cloud Development Kit](#) - By Philipp Garbe.
- [Boost your AWS Infrastructure with the CDK](#) - SlideShare by Philipp Garbe.
- [Getting started with AWS CDK for Amazon ECS](#) - By Nathan Peck.
- [AWS re:Invent 2018, best of show: CDK](#) - Aller Media Tech Blog.
- [AWS Cloud Development Kit introduction with Live Demos](#) - AWS User Group Finland Meetup January 2019.
- [AWS CDK—a glimpse into the future](#) - By Nordcloud Engineering.
- [AWS Infrastructure as Code with CDK](#) - By Ross Rhodes.
- [Callbacks with AWS Step Functions](#) - By Ross Rhodes.
- [Using the CDK for CodePipelines Setup](#) - By Stefan Freitag.
- [Using the CDK for AWS MSK Setup](#) - By Stefan Freitag.
- [Serverless Dotnet - E01: Intro to AWS CDK](#) - By Jake Scott.
- [GitHub repository](#) - By Jake Scott.
- [Infrastructure is Code with the AWS CDK](#) - AWS Tech Talk Webinar.
- [tecRacer Amazon AWS Blog](#) - Several Blog Posts from aws-blog.de by Gernot Glawe.
- [Using CDK to build a UDP NLB Logging Service](#) - By ClouderDex.
- [GitHub Repo](#) - By ClouderDex.
- [Purely Functional Cloud Components with AWS CDK](#) - Bu fogfish.
- [Using the CDK to probe multiple accounts \(sfn/lambda/sqs/sechub\)](#) - Blog post from fudless.xyz.
- [Scheduled Lambda Functions and CI/CD pipeline with AWS CDK](#) - By Maarten Thoelen.
- [GitHub Repo](#) - By Maarten Thoelen.
- [AWS Client VPN with mutual TLS](#) - By Kirill Merkushev.
- [CDK Step Functions](#) - By Matt Morgan.
- [Loading DynamoDB with Custom Resources](#) - By Matt Morgan.
- [Loading DynamoDB with Provider Framework](#) - By Matt Morgan.
- [German: React SPA und server-side rendering \(SSR\) mit AWS Lambda und CloudFront](#) - By superluminar GmbH.

- [Introducing AWS CDK with a real life Lambda and API gateway example](#) - By Alexander Fortin.
- [CloudWatch Dashboards as Code \(the Right Way\) Using AWS CDK](#) - By Simon-Pierre Gingras.
- [Coding the Jamstack missing parts: databases, crons & background jobs](#) - By Vincent Voyer.
- [AWS CDK Continuous Integration and Delivery Using Travis CI](#) - By Thomas Poignant.
- [Custom Resources with AWS CDK](#) - By Roy Ben-Yosef.
- [Recommended AWS CDK project structure for Python applications](#) - By Alex Pulver.

Related Projects [↗](#)

- [jsii](#) - JavaScript interop interface, the technology that CDK uses to create language bindings (currently supports .NET, Java and Python).
- [cdk8s](#) - Define Kubernetes native apps and abstractions using object-oriented programming.
- [cdktf](#) - Define infrastructure resources using programming constructs and provision them using HashiCorp Terraform.
- [cdktg](#) - Agile Threat Modeling as Code.

Tips & Tricks [↗](#)

- [Reflect on the CDK Type System](#) - Explore the CDK's type system.
- [Testing Your Construct Library CodeBuild Configuration Locally](#) - With the `jsii/superchain:latest` Docker Image.

Contributing [↗](#)

Contributions welcome! Read the [contribution guidelines](#) first.

Contributors 63



+ 52 contributors